SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE SALMON FISHERY

REPORT TO THE ALASKA BOARD OF FISHERIES, 2004

By

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ABSTRACT

The South Unimak and Shumagin Islands June fisheries occur along the south side of the Alaska Peninsula and Unimak Island. June fisheries have existed at these locations since at least 1911. Fish traps were a major method of capturing salmon in both fisheries before Alaska became a state. Today salmon are caught by seine, drift gillnet, and set gillnet gear at South Unimak and by seine and set gillnet gear in the Shumagin Islands.

The South Unimak and Shumagin Islands June fisheries were managed on the basis of forecasted Bristol Bay sockeye salmon *Oncorhynchus nerka* harvests from 1975 through 2000. These fisheries also harvest chum salmon *O. keta* which are destined for a wide range of locations, from Japan to British Columbia, with a substantial proportion going to the Arctic-Yukon-Kuskokwim (AYK) Region where there are concerns over stock health. Consequently, the Alaska Board of Fisheries (BOF) placed a chum salmon harvest cap on both South Peninsula June fisheries to protect AYK chum salmon stocks in 1986 and from 1988 through 2000. In 2001, the BOF designated several AYK chum salmon stocks plus the Kvichak sockeye salmon as stocks of concern. Since 2001 the South Peninsula June fisheries have been limited to no more than nine fishing days for seine and drift gillnet gear but with no harvest limits.

In 2001, a price dispute kept some harvesters from fishing during June, resulting in very low effort and low catches. Sockeye salmon harvests in 2002 and 2003 from both fisheries combined were about 591,000 and 453,000 fish, respectively. These harvests were lower than any year between 1979 and 2000 except 1986 when the fishery was closed early because of a chum salmon cap. Chum salmon harvests were about 379,000 and 282,000, respectively, in 2002 and 2003 for the combined South Unimak and Shumagin Islands June fisheries. These harvests were at or above the chum salmon harvests of 1996 through 2000.

The exvessel value of the 2002 and 2003 average June South Peninsula salmon harvest was less than 18 percent of the 1991-2000 average.

INTRODUCTION

The purpose of this report is to provide information on the locations of the South Peninsula June salmon fisheries and a history of harvests and regulations concerning the South Unimak and Shumagin Islands June fisheries.

Figures 1, 2, and 3 indicate the location of the South Unimak and Shumagin Islands. The South Unimak (also called False Pass) fishery occurs in two major fishing locations along the south side of Unimak Island (Figure 2). One area is from Ikatan Bay to Cape Lazaref on the southeast side of Unimak Island while the other is in the vicinity of Cape Lutke on the southwest end of the island. The Shumagin Islands fishery takes place primarily along Popof, Unga, and Korovin Islands in the northern portion of the Shumagin Islands Section (Figure 3). Popof Head on Popof Island is usually the center of activity. Table 1 lists the South Unimak and Shumagin Islands sockeye and chum salmon catches from 1960 through 2003 and Table 2 lists sockeye salmon harvests prior to 1960. Unfortunately, June chum salmon harvest data prior to 1960 were not separated from the total season harvest figures. Appendices A.1, A.2, and A.3 list the harvests of all species of salmon during 1970 through 2003.

HISTORY OF THE SOUTH UNIMAK FISHERY

The South Unimak June fishery dates back to at least 1911, although records prior to Statehood are sporadic (Table 2; Burkey et al. 2003).

Fish traps were operated in Ikatan and Morzhovoi Bays with as many as 36 traps reported in 1919 (Shaul 2000). The number of traps gradually decreased through the 1920s and 1930s and was relatively constant at 5-6 through the 1940s and 1950s. Records first reflect seine gear catches in 1935 (19 vessels), and indicate a little over a dozen seine vessels fishing seasonally through 1940 (Shaul 2000). Records reflect only about half-a-dozen seiners from the mid 1940s through the 1950s, although it is believed effort increased to around 50 vessels in the early 1950s.

From 1960 through 1975 seine effort at South Unimak ranged from 5 to 26 vessels (Shaul 2000). Since 1975 seine effort increased and peaked in 1993 when 116 vessels fished in South Unimak and Shumagin Islands fisheries (Table 3). Seiners may move between the South Unimak and Shumagin Islands fisheries during June. Seine effort has declined in recent years at South Unimak because of poor fishing, low prices, difficulty in finding crew members, and a restrictive management plan. In 2003, 17 seiners made at least one delivery in the South Unimak fishery.

Records of gillnet catches prior to statehood are not reliable; however, the use of gillnet gear was documented in the South Unimak fishery before 1960 (drift nets beginning in the 1950s). Gillnet effort (almost entirely drift nets) generally ranged from 20 to 45 vessels between 1960 and 1965 (Shaul 2000). Drift gillnet effort increased to between 120 and 155 vessels in 1970 through 1973, fell to 80 in 1975 and rebounded to between 101 and 120 during 1976 through 1978. During 1979

through 2000 drift gillnet gear has ranged from 129 to 157 vessels, comparable to the 1970 through 1973 level. The number of drift gillnet vessels participating in the South Unimak June fishery dropped again in 2001 and ranged from 84 vessels in 2003 to 86 vessels in 2002 (Table 3). The reason for the recent decline is likely a combination of a more restrictive management plan and low salmon prices (Table 4).

Set gillnet gear accounts for a small portion of the South Unimak catch (Tables 5 and 6). The set gillnet annual harvest averaged 5.5 percent of the sockeye and 3.6 percent of the chum salmon harvested at South Unimak during 1995 through 2003. The use of set gillnet gear increased from zero to 2 operators in 1970 through 1975 to between 13 and 31 permits during 1989-2000 (Shaul 2000). In past years, when the Shumagin Islands fishery was closed, a considerable number of set gillnetters moved to South Unimak. Fifteen set gillnet permit holders operated in the South Unimak June fishery in 2003.

HISTORY OF THE SHUMAGIN ISLANDS FISHERY

The Shumagin Islands June fishery also dates back to at least 1911 (Table 2). However, records indicate that this fishery did not develop significantly until 1922 when 550,000 sockeye salmon were harvested. Similar to South Unimak, information prior to Statehood is sporadic (Shaul 2000).

Traps were first recorded in the Shumagin Islands in 1919. The number of traps generally totaled 3 to 6 and peaked at 8 in 1937 (Shaul 2000). Seine catches have been recorded since 1911 and over 30 seiners fished in 1943 and 1944. From 1962 through 1975, the seine effort usually consisted of 15 to 25 vessels. During 1984 through 2000, purse seine vessels numbered from 37 to 77 in the Shumagin Islands June fishery (Shaul 2000). During June 2003, 24 purse seine permit holders made at least one delivery in the Shumagin Islands Section. In the past, some fishermen have moved to South Unimak during mid and late June to avoid crowded conditions in the Shumagin Islands and to seek better fishing opportunities. However, in most recent years, the fishing at South Unimak has been poor for seiners. Tables 7 and 8 list sockeye and chum salmon harvests by gear in the Shumagin Islands from 1970 to the present.

During 1970 through 1983 the number of set gillnet permit holders fishing in the Shumagin Islands during June ranged from 5 to 22 (Shaul 2000). This increased to between 30 and 40 during periods when the Southeastern District Mainland fishery was closed in 1985 and 1986. Since 1987, excluding 2001 when some permit holders did not fish because of a price dispute, the number of set gillnetters operating during June ranged from 41 to 53. In 2003, 41 set gillnet permit holders participated in the Shumagin Islands June fishery.

Drift gillnet gear is not allowed in the Shumagin Islands. The total units of gear operated in the South Unimak and Shumagin Islands June fisheries combined during the years 1970 through 2003 are listed in Table 3.

REGULATIONS GOVERNING SOUTH UNIMAK AND SHUMAGIN ISLANDS FISHERIES

Fishing time was liberal prior to 1973 and was not based on the strength of the forecasted Bristol Bay sockeye salmon run (Shaul 2000; Table 4). During the late 1960s and early 1970s, controversy arose between Peninsula-Aleutians and Bristol Bay fishermen concerning the South Unimak and Shumagin Islands June fisheries.

Beginning in 1975, the Alaska Board of Fish and Game established guideline harvest levels (GHLs) based on average historic catches. The GHL for the Shumagin Islands was 1.5% of the latest inshore Bristol Bay projected sockeye salmon harvest, while the South Unimak fishery was allocated 6.8% of the Bristol Bay inshore projected sockeye salmon harvest. The total GHLs for each fishery were further broken down into four time period GHLs, to distribute the catches throughout the month of June (Shaul 2000).

Although chum salmon have always been caught during the June fisheries, the unusually large chum salmon catches in 1982 and 1983 caused concern by fishermen in the Arctic-Yukon-Kuskokwim (AYK) Region (Appendix A.1). Beginning with the 1984 season, the Alaska Board of Fisheries (BOF) placed a limit on fishing time, not to exceed 96 hours per week and not more than 72 consecutive hours in order to allow "escapement windows" (Table 4). The purpose of the "windows" was to limit the chum salmon harvest. Due to the high sockeye salmon catch rate (and low chum to sockeye catch ratios) during 1984 and 1985, these restrictions were not implemented because the GHLs were easily met (Shaul 2000).

In 1986, the BOF placed a 400,000 chum salmon catch ceiling on both fisheries combined, eliminated fishing during the first 10 days of June, and eliminated fishing during the last quota period, June 26-30 (along with the sockeye quota for that period). These restrictions applied to the 1986 season only (Table 4). The additional restrictions during 1986 were the primary reasons for less than half of the combined South Unimak-Shumagin Islands sockeye salmon allocation being harvested in that year (Appendices A.4 and 5).

The regulations for the 1987 season were the same as those used in 1985. (Table 4). However, during 1988 and 1989 the BOF placed an annual 500,000 chum salmon catch ceiling on both fisheries combined.

In 1988, the abundance of chum salmon was about equal to sockeye salmon at South Unimak. This resulted in less than 40% of the South Unimak sockeye allocation being harvested before the chum salmon ceiling was reached. The sockeye salmon abundance seemed higher in the Shumagin Islands and that fishery was able to harvest its allocation (Appendix A.4).

In 1989, the sockeye salmon abundance was very high and the sockeye salmon allocations were exceeded with relatively little fishing time (Appendix A.6). The Shumagin Islands Section sockeye catch was 396,958 with an allocation of 264,000, while 1,347,547 sockeye salmon were harvested at South Unimak with an allocation of 1,199,000 fish (Burkey et al. 2003; Table 1). A total of only

72 hours fishing time was allowed in the Shumagin Islands Section during 4 days (Appendix A.6.). At South Unimak, 84 hours of fishing time was allowed with openings occurring during 5 separate days. The 1989 chum salmon catch was 47,528 in the Shumagin Islands Section and 407,635 at South Unimak for a total of 455,163 fish (Table 1). The ratio of sockeye to chum salmon was low during the early part of the fishery and became unusually low towards the end (Shaul et al. 1990).

After the 1989 season, the BOF made the following changes in regards to the South Unimak and Shumagin Islands June fisheries (Table 4):

(1) The starting date of the fishery was delayed until June 13 because the sockeye salmon to chum salmon ratio is normally lower during early June.

(2) The chum salmon ceiling for both fisheries combined was raised from 500,000 to 600,000.

(3) The "window regulations" were eliminated as there did not seem to be a need for both a chum salmon ceiling and windows.

(4) The sockeye salmon allocation periods and allocations were changed. The percent of the total allocation by period were the same for each fishery.

June 13-18	35%
June 19-25	45%
June 26-30	20%
Total	100%

If catches in either fishery fall below the guidelines in the June 13-18 period, those unharvested sockeye salmon, up to a maximum of five percent of the total allocation for that fishery, could be harvested during the June 19-25 period. The June 26-30 period could not be used to make up for underharvests during the first two periods. The best available information showed that the sockeye salmon stock composition between the first two periods was very similar; however, the June 26-30 stock composition at South Unimak-Shumagin Islands could be dominated by fewer and later stocks (Eggers, et al. 1991).

(5) Unlimited seine leads were eliminated at South Unimak and leads of 50 to 150 fathoms were determined to be the only legal lengths for the entire Alaska Peninsula.

(6) For the first time, maximum depth restrictions were placed on seine and gillnet gear. For the entire Alaska Peninsula Area seine gear could not exceed 375 meshes in depth. Seine mesh size could not exceed 3-1/2 inches except the first 25 meshes above the lead line could not be more than 7 inches (5 AAC 09.332). No gillnet gear used along the South Peninsula could exceed 90 meshes in depth (5 AAC 09.331).

(7) The area comprising the South Unimak fishery was expanded to include the following portions of the Southwestern District located outside the Ikatan Bay Section (Figure 2):

(a) all waters north and west of a line from Cape Pankof Light to Thin Point.

(b) all waters enclosed by a line from Thin Point to Stag Point on Deer Island to Dolgoi Cape and from Bluff Point on Dolgoi Island to Arch Point.

In 1990, sockeye salmon were not available in large numbers in the Shumagin Islands Section or at South Unimak despite the fact that Bristol Bay experienced one of its largest runs on record (Shaul, et al. 1991). Windy weather plagued fishing operations but fish abundance also seemed low, especially in view of the huge run that arrived in Bristol Bay. The Shumagin Islands sockeye salmon harvest was 255,585 fish compared to a GHL of 240,000 (Appendix A.4). The Shumagin Islands Section was open to fishing for a total of 198 hours during 9 days (Appendix A.6). At South Unimak, the sockeye salmon allocation was 1,087,000 fish and the harvest was 1,088,944 (Table 1; Appendix A.4). A total of 63,501 chum salmon were caught in the Shumagin Islands Section and 455,044 were caught at South Unimak for a combined total of 518,545 (Table 1). The South Unimak fishery was open to fishing for 267 hours during 13 days (Appendix A.6).

In 1991, the fisheries were delayed until June 15 in an attempt to minimize the chum salmon harvest (Shaul 2000). The sockeye salmon GHL for South Unimak was 1,573,000 fish while that of the Shumagin Islands was 347,000 (Appendix 4)). The percentage of chum salmon in the total number of salmon available for harvest is normally high during early June and is lower when sockeye salmon runs are peaking during mid June. Test fish results during 1991 confirmed this. The Shumagin Islands fishery harvested 333,272 of its sockeye allocation and harvested 102,602 chum salmon (Table 1). At South Unimak, 1,215,658 sockeye and 670,103 chum salmon were caught. The total South Unimak and Shumagin Islands chum catch of 772,705 chum salmon exceeded the cap by 173,000. The reason for the cap being exceeded was an unexpected large number of small chum salmon migrating into the fishery at Cape Lutke and Sanak Island on June 24 and 25. The average weight of seine caught chum salmon dropped from 6.3 pounds on June 23 to 5.7 pounds on June 24 and 25. Some of the seine-caught chum salmon on June 24 and 25 were said to be "skinny snakelike fish with no roe". During July, there are sometimes large numbers of chum salmon as described above in the vicinities of Sanak Island, Cape Lutke, Cape Lazaref, and in the eastern portion of the Aleutian Islands Management Area (Shaul 2000). These fish are of little or no economic value and appear in such large numbers that the department has closed these areas to commercial salmon fishing.

Since 1991, the Alaska Department of Fish and Game (ADF&G) has been much more cautious when establishing fishing periods when there is a limit to the number of salmon that can be harvested (Table 4). The department has also closed the waters around Sanak Island to commercial salmon fishing during June (Shaul 2000). The Sanak Island waters are not a major sockeye salmon harvest location and were only fished sporadically. However, Sanak Island waters contain large numbers of chum salmon during some years.

The potential impact of the chum salmon cap on the ability of the South Unimak and Shumagin Islands June fisheries to harvest their sockeye allocations is greater than the record indicates. In 1989 and 1990, the South Peninsula fisheries would have foregone large harvests (in the hundreds of thousands) of sockeye salmon because of the chum cap if the Bristol Bay sockeye salmon run had been forecasted perfectly, resulting in much larger South Peninsula sockeye salmon allocations (Shaul 2000; Table 1; Appendix A.5).

Harvesting the total sockeye salmon allocations in the South Unimak and Shumagin Islands June fisheries with a chum salmon cap can be difficult and sometimes impossible, especially with large sockeye salmon allocations. At the fall 1991 BOF meeting, the chum salmon cap was changed to 40% of the combined South Unimak and Shumagin Islands sockeye salmon allocation and not to exceed 900,000 fish (Shaul 2000). However, this change generated much controversy from fishermen in the AYK Region because the chum salmon cap would be 900,000 fish in 1992 and likely that amount for the next two or three years, based on initial long range Bristol Bay sockeye salmon projections. The BOF addressed the chum salmon cap issue again at their spring 1992 meeting and changed the cap to 700,000 chum salmon, regardless of the sockeye salmon allocation. The BOF also stipulated that unless the chum cap was in danger of being exceeded, set gillnet fishing periods would not be less than 16 hours even if it was necessary to restrict seine and drift gillnet gear to less than 16 hours due to chum salmon conservation. This was due to set gillnet gear generally having high sockeye to chum salmon ratios (Appendix A.7).

In 1992, the respective sockeye salmon allocations were 1,959,000 and 432,000 fish for the South Unimak and Shumagin Islands fisheries (Burkey et al. 2003). The fishery was delayed until June 15 because of the high number of chum salmon caught in the Shumagin Islands test fishery. From June 15 until the end of the fishery on June 26, sockeye to chum salmon ratios were very high (Burkey et al. 2003). A total of 2,046,022 sockeye salmon were harvested at South Unimak while the Shumagin Islands harvest was 411,834 (Table 1). The chum salmon harvest from both fisheries combined was 426,203.

In 1993, the South Unimak and Shumagin Islands sockeye salmon allocations were 2,375,000 and 524,000 fish respectively (Burkey et al. 2003). Test fishing in the Shumagin Islands during June 7-11 indicated acceptable sockeye to chum salmon ratios. Consequently, fishing began on June 13, the earliest date allowed by the South Unimak and Shumagin Islands June Management Plan. Sockeye to chum salmon ratios remained high in both fisheries until the last week in June. The Shumagin Islands sockeye to chum salmon ratio was 1.8 to 1 on June 26 as compared to 9.0 to 1 during the previous fishing day of June 21. The South Unimak sockeye to chum salmon ratio was 1.3 to 1 on June 29, down from the June 27 ratio of 8.8 to 1. The total 1993 sockeye salmon harvest was 2,366,573 fish at South Unimak and 607,171 in the Shumagin Islands. The combined chum salmon catch from both fisheries was 532,247 fish (Table 1).

In 1993, AYK chum salmon stocks were at low levels resulting in very little commercial fishing targeting chum salmon (Francisco et al. 1994). Subsistence fishing for AYK chum salmon was not allowed in some locations. Consequently, during 1993 and 1994, the BOF conducted two out of cycle meetings devoted to the South Unimak-Shumagin Islands June fishery. The first meeting was non regulatory but resulted in the second meeting in which regulatory changes were made.

During the spring 1994 meeting, the BOF allowed the ADF&G to open the South Unimak-Shumagin Islands fisheries prior to June 13 if sockeye to chum salmon ratios were favorable, and eliminated the time period allocations. Elimination of time period allocations would have resulted in a substantially lower harvest of chum salmon in 1993 (McCullough and Pengilly 1994).

The 1994 sockeye salmon allocations were a record high, totaling 2,938,000 fish at South Unimak and 648,000 in the Shumagin Islands (Burkey et al. 2003). Test fishing in the Shumagin Islands indicated that sockeye to chum salmon ratios were poor and no fishing was allowed in the Shumagin Islands until June 18. Test fishing results at South Unimak on June 15 and 16 were better than those in the Shumagin Islands and fishing started on June 17.

The 1994 fishery was characterized by low catch rates of sockeye and chum salmon but record June pink salmon catches (Appendix A.1). Sockeye to chum ratios were mediocre during most of the fishery and were lower at the end (Burkey et al. 2003).

The total sockeye salmon harvest was very disappointing to fishermen and processors in the Alaska Peninsula Area. At South Unimak, 1,001,250 sockeye salmon (34% of allocation) were harvested. In the Shumagin Islands 460,013 sockeye salmon (71% of allocation) were harvested. The combined chum salmon catch was 582,165 fish (Table 1).

The 1994 Bristol Bay sockeye salmon run was below forecast but was still a very strong run and produced an inshore harvest of over 35 million fish (Appendix A.5). However, the sockeye salmon were not available in large numbers in the South Unimak and Shumagin Islands fisheries. Fishermen reported a drastic change in currents and colder inshore water temperatures.

Large numbers of chum salmon were reported to be in the South Unimak fishery throughout June but fishermen avoided areas with high chum salmon concentrations. These tactics apparently not only decreased the chum salmon catch but reduced the fleets ability to harvest sockeye salmon because the two species were reported to be traveling together in large numbers at some locations.

Following the 1994 season, the BOF implemented the following changes to the management plan.

1. June fishery cannot begin prior to June 11.

2. After June 24, in either the South Unimak or Shumagin Islands fishery, if the sockeye salmon guideline harvest level and the maximum allowable harvest of chum salmon have not been attained, and if the ratio of sockeye to chum salmon is two to one or less on any day, the next daily fishing period for seine and drift gillnet gear shall be of six hour duration in that fishery. After June 24, the South Unimak or Shumagin Islands fishery shall close for all gear types if the ratio of sockeye to chum salmon is two to one or less for any three aggregate days.

3. The BOF stated its intent that keeping the chum salmon harvest below the cap supersedes any attempt to reach the sockeye salmon GHLs.

4. The BOF eliminated minimum mesh size requirements for gillnets during the June fisheries.

In 1995, the sockeye salmon GHLs were another record high with 2,987,000 fish allocated to South Unimak and 659,000 to the Shumagin Islands for a total of 3,646,000 (Burkey et al. 2003; Appendix A.4). Test fishing in the Shumagin Islands and at South Unimak indicated that the sockeye to chum salmon ratios were slightly higher than in 1994. Consequently both fisheries opened on June 13. However, the sockeye salmon harvest rates were again low. Almost continuous fishing was allowed in both fisheries until the end of June: through June 30 at South Unimak, and through June 29 in the Shumagin Islands where the sockeye salmon allocation was achieved. The 1995 South Unimak harvest was 1,451,490 sockeye salmon and 342,307 chum salmon; the fishery was 1,536,000 fish under the sockeye salmon GHL. The Shumagin Islands catch totaled 653,831 sockeye and 195,126 chum salmon and was only 5,000 fish under the sockeye salmon GHL (Table 1). The combined harvest of both fisheries was 2,105,321 sockeye and 537,433 chum salmon; 1,541,000 sockeye salmon less than the GHL (Appendix A.4) and about 163,000 chum salmon less than the 700,000 cap. The combined sockeye GHL was not achieved because sockeye salmon were not available in large numbers at South Unimak. The actual Bristol Bay sockeye harvest was slightly larger than the forecast (Appendix A.5).

The 1996 South Unimak sockeye salmon GHL was 2,564,000 fish while that of the Shumagin Islands was 566,000 (Burkey et al. 2003). Based on test fishing results, the South Unimak fishery did not begin until June 15 and the Shumagin Islands did not open until June 18. The purpose of test fishing was to open the commercial fisheries when the sockeye salmon harvest could be maximized without reaching the chum salmon cap. Salmon harvest rates were extremely low in both South Unimak and Shumagin Islands fisheries and almost continuous fishing was allowed. At South Unimak, despite continuous fishing from June 18 through June 30, only 572,495 sockeye salmon (23.3% of the allocation) were harvested (Table 1). In the Shumagin Islands Section 456,475 sockeye salmon were caught, bringing the combined South Unimak-Shumagin Islands sockeye salmon harvest to 1,028,970 (33% of the allocation). A total of 359,820 chum salmon were harvested (129,889 at South Unimak and 229,931 in the Shumagin Islands), about 340,000 fish below the 700,000 cap (Table 1).

In 1997, the South Unimak fishery opened on June 13. Because of a price dispute, fishing effort consisted of only 58 to 97 drift gillnet boats from June 13 through 17 (Burkey et al. 2003). The dispute was settled on June 18. Sockeye to chum salmon ratios were favorable and continuous fishing was allowed through June 30. The sockeye salmon harvest was 1,179,179 fish, 36% below the 1,840,000 GHL (Burkey et al 2003). The 1997 Shumagin Islands fishery opened on June 19 and fishing was allowed daily until June 26 when the sockeye salmon GHL of 406,000 (Burkey et al. 2003) was exceeded. The Shumagin Islands harvest was 449,002 sockeye salmon. A total of 322,325 chum salmon were harvested (196,016 at South Unimak and 126,309 in the Shumagin Islands), 377,675 fish below the 700,000 cap (Table 1).

After the 1997 season, the BOF lowered the chum salmon cap from 700,000 fish to a “floating cap” that could range from 350,000 to 650,000 depending on the projected strength of harvests of summer chum salmon in the AYK Region in relation to the 1970-present average. If the projected AYK chum salmon was less than 33% of the average catches in the summer run index area, the South Peninsula cap would be 350,000 to 450,000. If the projected AYK summer run index chum salmon harvest was between 33% and 67% of the 1970-present average, the South Peninsula cap

was between 450,001 and 550,000 chum salmon. If the AYK summer chum salmon harvest index group exceeded 67% of the 1970-present average, the South Peninsula chum salmon cap would be 550,001 to 650,000 fish. If the department identified a summer chum salmon stock of concern, the upper end of the cap would be reduced by 50,000 fish. The earliest opening date was changed from June 11 to June 10. In the Unimak District, the shoreward end of a set gillnet had to be within one half mile of shore. All salmon caught had to be retained and reported. The use of aircraft to locate salmon was prohibited for the entire Alaska Peninsula Area for the entire season.

In 1998, the South Unimak and Shumagin Islands fisheries both opened to commercial salmon fishing on June 13. However, the entire seine fleet and approximately 80% of the set gillnetters did not fish because of a dispute over salmon prices. The entire drift gillnet fleet at South Unimak went fishing on June 13. As the fishery progressed more set gillnetters participated and on June 17 the seiners and the balance of the set gillnet fleet went fishing. The 1998 sockeye salmon harvest rates were low in both the South Unimak and Shumagin Islands fisheries. Despite continuous fishing from June 13 through June 30, only 974,628 sockeye (63.7% of the allocation) and 195,454 chum salmon were harvested at South Unimak. A total of 314,097 sockeye salmon (93.5% of the allocation) and 50,165 chum salmon were harvested in the Shumagin Islands Section (Table 1).

In 1999, the South Unimak fishery was opened for 16 hours on June 11, reopened on June 13 and was repeatedly extended until 3:00 PM June 21 when the sockeye salmon GHL was reached. The Shumagin Islands fishery opened on June 13 and was repeatedly extended until 1:00 PM June 18 when the GHL was reached (Shaul 2000). The 1999 sockeye salmon daily harvest rates were higher than in the past three years in both the South Unimak and Shumagin Islands fisheries. After nearly continuous fishing from June 11 through June 21, 1,106,208 sockeye (8.0% over the allocation) and 186,886 chum salmon were harvested at South Unimak (Table 1). A total of 269,191 sockeye (19.1% over the allocation) and 58,420 chum salmon were harvested in the 1999 Shumagin Islands fishery.

Based on the Bristol Bay forecast, the respective 2000 June GHLs were 1,650,000 and 363,000 sockeye salmon for the South Unimak and Shumagin Islands fisheries (Burkey et al. 2003). Test fishing results in the Shumagin Islands indicated that the sockeye to chum salmon ratio was high enough that a fishing period could be allowed on June 11. However, no commercial fishing occurred during June 11 and 12 because of a price dispute between fishermen and processors. Test fishing continued during June 11 and 12 (Shaul 2000).

The South Unimak test fish sockeye to chum salmon ratio was too low to justify a fishery on June 11. After the announced Shumagin Islands opening for June 11, all three of the South Unimak test fish boats quit test fishing and departed for the Shumagin Islands commercial fishery. A price settlement was reached on June 13 and commercial fishing began. During June 13, sockeye to chum salmon ratios were high and both fisheries were repeatedly extended. The South Unimak fishery remained open through June 30. The Shumagin Islands Section closed at 10:00 PM June 18 when it was estimated that the sockeye salmon GHL would be reached. The 2000 South Unimak harvest was 892,016 sockeye salmon (54.1% of the GHL) and 168,604 chum salmon (Table 1). The Shumagin Islands harvest was 359,212 sockeye salmon (99.0% of the allocation) and 70,463

chum salmon. The combined South Unimak-Shumagin Islands chum salmon harvest in 2000 was 239,067 fish, well below the chum salmon GHL of 350,000 to 400,000 (Shaul 2000).

The catching power of the South Unimak and Shumagin Islands June fisheries appears to be substantially lower for all species during recent years than it was during the 1980s due to the following factors:

1. The gear depth restrictions implemented in 1990.

2. The drift gillnet fleet now dominates the Cape Lutke Section and as a result purse seiners seldom fish at Cape Lutke anymore. The drift gillnet fleet does not usually have the harvesting capacity of the seiners. Salmon catches by purse seiners were so high during some years (in the 1980s) at Cape Lutke that the South Unimak sockeye salmon allocation was harvested in a very short time, this is no longer the case.

3. Because Cape Lutke is no longer a productive area for seiners and the prices paid for salmon during recent years have been low, few nonresident purse seine permit holders currently fish in Area M. This has resulted in a purse seine fleet that is substantially smaller than the 1982-1996 fleet (Table 3).

4. Because of low prices the drift gillnet fleet has also decreased from 116 permit holders in 1993 to about 85 permit holders participating in 2002 and 2003 (Table 3).

5. Salmon may have changed their migration routes and/or timing because of oceanographic or climatic factors, and may not be as abundant in areas where the June fisheries occur.

The gear depth restrictions may have reduced the harvest of chum salmon in the South Unimak fishery. Since 1990, drift gillnetters generally have had higher sockeye to chum salmon ratios than seiners at South Unimak. Prior to 1990, seiners had higher ratios than drift gillnetters during some years (Appendix A.4).

There have been substantial shifts in the percentage of the catches taken by various gear types over the years. The amount of set gillnet gear and percentages of the harvests taken by set gillnets have increased since the 1970s in both fisheries but particularly in the Shumagin Islands. Drift gillnet gear dominated the South Unimak catches during the 1970s. Purse seiners dominated the South Unimak harvests during most years between 1979 and 1994. Since 1995, drift gillnetters have again dominated the South Unimak fishery. The percent of the total sockeye and chum salmon harvests by gear type are listed in Table 5.

In 2001, the BOF made major changes to the South Unimak and Shumagin Islands June Salmon Management Plan (5 AAC 09.365; Table 4). These changes included:

1. Eliminated the sockeye salmon guideline harvest levels.

2. Eliminated the chum salmon guideline harvest levels.

3. Limited fishing time to no more than 16 hours per day by any gear group.

4. Limited total fishing time by seine and drift gillnet gear to no more than 48 hours in a floating seven day period with no more than two 16-hour periods on consecutive days in any seven day period.

5. From June 10 through June 24 in the South Unimak and/or Shumagin Islands fisheries, set gillnet gear may fish on consecutive days for 16-hour periods as long as the set gillnet sockeye to chum salmon ratios in that fishery are equal to or greater than the recent 10-year average for that fishery. If the set gillnet sockeye to chum salmon ratio falls below the recent 10-year average in either fishery, that fishery will be closed for one period. From June 10 through June 24, daily fishing periods for set gillnet gear will be from 6:00 AM until 10:00 PM.

6. Purse seine and drift gillnet fishing periods through June 24 will occur at the same time in the South Unimak and Shumagin Islands fisheries.

7. After June 24, in either the South Unimak or Shumagin Islands fishery, if the ratio of sockeye to chum salmon by all gear combined is two to one or less on any day, the next fishing period shall be of six hours duration for all gear in that fishery. If the sockeye to chum salmon ratio is two or greater, a six hour fishing period can be extended to a maximum of 16 hours. The South Unimak or Shumagin Islands fishery shall close for all gear groups if the ratio of sockeye to chum salmon is two to one or less for two consecutive fishing periods.

SUMMARY OF 2001, 2002, AND 2003 SEASONS

In 2001, there was a price dispute during all of June between many of the harvesters and the major processors. Only 121,547 and 29,095 sockeye salmon were harvested at South Unimak and the Shumagin Islands June fisheries, respectively (Table 1). A total of 36,099 chum salmon were harvested at South Unimak while 12,251 chum salmon were taken in the Shumagin Islands during June (Table 1).

During 2002, 356,157 sockeye and 201,211 chum salmon were harvested in the South Unimak June fishery while 234,949 sockeye and 177,606 chum salmon were taken in the Shumagin Islands (Table 1). Harvest rates were relatively low all season.

Set gillnet gear fished during 11 days at South Unimak compared to 9 days for the other gear types in 2002. Shumagin Islands set gillnetters fished during 10 days while seiners were allowed to fish 9 periods (Appendix A.6). It was difficult to determine sockeye to chum salmon harvest ratios while the fishery was in progress. There were verbal reports of set gillnet ratios being greater than the recent 10-year average which proved to be wrong when harvest numbers were reported by the processors the following morning.

In 2003, 335,903 sockeye and 121,169 chum salmon were harvested at South Unimak. The Shumagin Islands fishery harvest consisted of 117,244 sockeye and 161,267 chum salmon. The daily 2003 harvest figures for each fishery are listed in Table 9.

Set gillnet gear fished during 12 days in the South Unimak fishery compared to 9 days for seine and drift gillnet gear (Appendix A.6). Set gillnet gear in the Shumagin Islands fished 10 days while seiners fished on 9 days. Management decisions on set gillnet fishing periods based on verbal reported sockeye to chum salmon harvest ratios were difficult again in 2003, but generally the decisions were correct when comparing the verbal reports to the actual harvest data.

The amount of fishing days and hours were much lower in 2002 and 2003 than during those years 1975 to 2000 when the sockeye salmon harvest allocation was not achieved or when the chum salmon cap was reached (Appendix A.6).

The exvessel value of the South Unimak and Shumagin Islands June fisheries has fallen in recent in recent years. From 1985 through 1995, the exvessel value of these fisheries averaged approximately $12,598,976. During the next five years the average exvessel value dropped to approximately $7,379,410 (Appendix A.8). In 2002 and 2003, the average exvessel value of the South Unimak and Shumagin Islands June fisheries was only about $1,745,699, only 14% of the average 1985-1995 value and 24% of the 1996-2000 average value. The exvessel value for 2001 is not included because of a lengthy strike. Reasons for the decline in value appear to be a combination of low prices for salmon, lower total returns of Bristol Bay sockeye, and substantially reduced fishing time.

The percent of the combined South Unimak-Shumagin Islands and Bristol Bay sockeye salmon harvest taken by the South Unimak and Shumagin Islands fisheries during 2002 and 2003 was 4.09 % (Appendix A.5). This is down from 1975 through 2000 when the South Unimak and Shumagin Islands June fisheries averaged 5.65% of the combined harvest (Appendix A.7).

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Table 1. South Unimak and Shumagin Islands June sockeye and chum salmon harvest, in number of fish, 1960-2003.

	Sockeye[a]			Chum[a]		
Year	South Unimak	Shumagin Islands	Total	South Unimak	Shumagin Islands	Total
1960	137,000	19,000	156,000	84,000	11,000	95,000
1961	199,000	55,000	254,000	157,000	36,000	193,000
1962	272,000	54,000	326,000	209,000	61,000	270,000
1963	116,000	33,000	149,000	36,000	36,000	72,000
1964	159,000	85,000	244,000	161,000	67,000	228,000
1965	568,000	207,000	775,000	121,000	45,000	166,000
1966	528,000	54,000	582,000	215,000	17,000	232,000
1967	186,000	69,000	255,000	73,000	51,000	124,000
1968	342,000	233,000	575,000	115,000	51,000	166,000
1969	781,000	76,000	857,000	254,000	13,000	267,000
1970	1,510,399	139,735	1,650,134	397,003	44,909	441,912
1971	422,760	39,341	462,101	405,311	103,886	509,197
1972	426,799	74,398	501,197	411,019	107,810	518,829
1973	222,586	22,964	245,550	177,720	22,910	200,630
1974	0	0	0	0	0	0
1975	190,774	49,325	240,099	65,279	35,543	100,822
1976	233,211	72,016	305,227	336,238	74,109	410,347
1977	195,680	45,912	241,592	94,215	21,899	116,114
1978	418,959	67,876	486,835	103,429	18,479	121,908
1979	672,293	179,139	851,432	63,153	40,953	104,106
1980	2,731,148	475,127	3,206,275	458,499	50,366	508,865
1981	1,470,563	350,572	1,821,135	509,911	54,071	563,982
1982	1,668,153	450,548	2,118,701	933,728	161,316	1,095,044
1983	1,547,369	416,494	1,963,863	616,390	169,277	785,667
1984	1,131,365	256,838	1,388,203	227,913	109,207	337,120
1985	1,454,969	336,431	1,791,400	324,825	109,004	433,829
1986	315,370	156,027	471,397	252,721	99,048	351,769
1987	653,536	140,567	794,103	406,077	37,064	443,141
1988	474,457	282,230	756,687	464,765	61,946	526,711
1989	1,347,547	396,958	1,744,505	407,635	47,528	455,163
1990	1,088,944	255,585	1,344,529	455,044	63,501	518,545
1991	1,215,658	333,272	1,548,930	670,103	102,602	772,705
1992	2,046,022	411,834	2,457,856	323,891	102,312	426,203
1993	2,366,573	607,171	2,973,744	381,941	150,306	532,247
1994	1,001,250	460,013	1,461,263	374,409	207,756	582,165
1995	1,451,490	653,831	2,105,321	342,307	195,126	537,433
1996	572,495	456,475	1,028,970	129,889	229,931	359,820
1997	1,179,179	449,002	1,628,181	196,016	126,309	322,325
1998	974,628	314,097	1,288,725	195,454	50,165	245,619
1999	1,106,208	269,191	1,375,399	186,886	58,420	245,306
2000	892,016	359,212	1,251,228	168,604	70,463	239,067
2001	121,547	29,095	150,642	36,099	12,251	48,350
2002	356,157	234,949	591,106	201,211	177,606	378,817
2003	335,903	117,244	453,147	121,169	161,267	282,436
1960-1973 Average	419,325	82,960	502,284	201,147	47,680	248,826
1975-2000 Average	1,092,302	317,144	1,409,446	334,205	94,104	428,309
2001-2003 Average	271,202	127,096	398,298	119,493	117,041	236,534

[a] Number of salmon does not include test fish catches.

Table 2. South Unimak and Shumagin Islands sockeye salmon harvest, 1911-1959.

Year	South Unimak	Shumagin Islands	Total
1911	58,000	3,000	61,000
1912	144,000	31,000	175,000
1913	415,000	0	415,000
1914	610,000	0	610,000
1915	251,000	0	251,000
1916	539,000	0	539,000
1917	1,322,000	34,000	1,356,000
1918	733,000	44,000	777,000
1919	545,000	32,000	577,000
1920	954,000	60,000	1,014,000
1921	831,000	0	831,000
1922	2,775,000	550,000	3,325,000
1923	1,340,000	343,000	1,683,000
1924	971,000	237,000	1,208,000
1925	357,000	374,000	731,000
1926	1,898,000	491,000	2,389,000
1927	455,000	185,000	640,000
1928-1933		Unavailable	
1934	516,000	1,019,000	1,535,000
1935	210,000	549,000	759,000
1936	1,531,000	1,490,000	3,021,000
1937	803,000	498,000	1,301,000
1938	164,000	454,000	618,000
1939	474,000	707,000	1,181,000
1940	479,000	713,000	1,192,000
1941	206,000	294,000	496,000
1942	152,000	412,000	546,000
1943	428,000	1,356,000	1,784,000
1944	188,000	264,000	452,000
1945	218,000	375,000	593,000
1946	342,000	257,000	599,000
1947	782,000	229,000	1,011,000
1948	276,000	126,000	402,000
1949	84,000	167,000	251,000
1950	292,000	134,000	426,000
1951	82,000	35,000	117,000
1952	191,000	121,000	312,000
1953	191,000	105,000	296,000
1954	325,000	49,000	374,000
1955	315,000	52,000	367,000
1956	290,000	47,000	337,000
1957	50,000	44,000	94,000
1958	104,000	28,000	132,000
1959	58,000	78,000	136,000

Table 3. Salmon gear in South Peninsula waters during June, 1970-2003.

	Gear[a]			
Year	Purse Seine	Drift Gillnet	Set Gillnet	Total
1970	39	156	16	211
1971	37	122	8	167
1972	32	150	7	189
1973	16	121	7	144
1974	0	0	0	0
1975	20	81	8	109
1976	25	108	16	149
1977	17	101	13	131
1978	23	120	16	159
1979	40	132	26	198
1980	68	129	29	226
1981	83	135	25	243
1982	90	138	23	251
1983	100	146	35	281
1984	101	147	32	280
1985	107	150	48	305
1986	99	156	43	298
1987	86	144	60	290
1988	90	148	63	301
1989	99	145	61	305
1990	109	153	59	321
1991	112	157	65	334
1992	112	141	68	321
1993	116	140	72	328
1994	114	145	65	324
1995	112	151	68	331
1996	99	147	67	313
1997	81	142	69	292
1998	64	145	74	283
1999	61	152	64	277
2000	70	149	59	278
2001	25	85	18	128
2002	36	86	59	181
2003	40	84	51	175
1991-2000 Average	94.1	146.9	67.1	309.3
2001-2003 Average	33.7	85.0	42.7	161.3

[a] Number of permits that made at least one delivery.

Table 4. History of regulations for the South Unimak and Shumagin Islands June commercial salmon fisheries, 1962-2003.

Year	South Unimak	Shumagin Islands
1962-66	5 days per week	5 days per week
1967-70	7 days per week	7 days per week
1971-72	6:00 A.M. Monday - 6:00 A.M. Saturday	7 days per week
1973[a]	Four 13 hour fishing periods per week	Four 13 hour fishing periods per week.
1974	No fishery	No fishery
1975-83[b]	6.8% of predicted Bristol Bay catch.	1.5% of predicted Bristol Bay catch.
1984-89[b]	No more than 96 hours per 7 day period and no more than 72 hours of consecutive fishing time in each fishery (windows).	
1986[b]	6.8% allocation minus June 26-30 segment Windows No fishing before June 11	1.5% allocation minus June 26-30 segment Windows No fishing before June 11
	A 400,000 chum salmon ceiling placed on both fisheries combined.	
1987[b]	Same as during 1984-85 for both fisheries.	
1988-89[b]	6.8% of predicted Bristol Bay catch Windows	1.5% of predicted Bristol Bay catch Windows
	A 500,000 chum salmon ceiling placed on both fisheries combined.	

-Continued-

Table 4. (page 2 of 4)

Dates	South Unimak	Shumagin Islands
June 1 - 11	5%	9%
June 12 - 18	29%	28%
June 19 - 25	51%	41%
June 26 - 30	15%	22%
	100%	100%

1990-91 The chum salmon ceiling was increased from 500,000 to 600,000.

The "Window Regulations" implemented in 1984 to limit the amount of fishing time that could be allowed were deleted.

The season was delayed until June 13 and the time period sockeye allocations for both fisheries were changed as follow:

June 13-18	35%
June 19-25	45%
June 26-30	20%

The gear depth for seines was limited to 375 meshes of which mesh size may not exceed 3-1/2 inches except for the first 25 meshes above the lead line which may not exceed 7 inches.

The gear depth on gillnets along the South Peninsula was limited to no more than 90 meshes.

Seine leads may not exceed 150 fathoms for the entire Alaska Peninsula.

1992-93 The chum salmon ceiling was increased from 600,000 to 700,000 fish. Fishing time for set gillnet gear could not be less than 16 hours unless a 16 hour period would result in a harvest that exceeded the cap for chum salmon. The other regulations were the same as in effect for 1990 and 1991.

1994 Sockeye salmon time period allocations eliminated. ADF&G given flexibility to open fishery prior to June 13 if sockeye to chum salmon ratios are favorable.

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Table 4. (page 3 of 4)

Dates	South Unimak	Shumagin Islands
1995-97	The amount of fishing time for seine and drift gillnet gear after June 24 is limited if the sockeye to chum salmon ratio is two to one or less. The Board of Fisheries stated it's intent that the remaining under the chum salmon harvest ceiling supersedes attempts to reach the sockeye guideline harvest levels. The fisheries could not be extended into July regardless of weather during late June. Fishery cannot begin prior to June 11. Removed mesh size requirements for gillnets.	
1998-00	The chum salmon ceiling was lowered from 700,000 to a "floating cap" that can range between 350,000 and 650,000. A commercial fishery for all gear types may open on June 10 if sockeye to chum salmon ratios are favorable. In the Unimak District the shoreward end of a set gillnet must be within one half mile of shore. All salmon caught must be retained and reported. Use of aircraft to locate salmon prohibited for the entire Alaska Peninsula for the entire season	
2001-present	Eliminated the sockeye salmon guideline harvest levels. Eliminated the chum salmon guideline harvest levels. Limited fishing time to no more than 16 hours per day by any gear group. Limited total fishing time by seine and drift gillnet gear to no more than 48 hours in a floating seven day period with no more than two 16-hour periods on consecutive days in any seven day period.	

-Continued-

Table 4. (page 4 of 4)

Dates	South Unimak	Shumagin Islands
	From June 10 through June 24 in the South Unimak and/or Shumagin Islands fisheries, set gillnet gear may fish on consecutive days for 16-hour periods as long as the set gillnet sockeye to chum salmon ratios in that fishery are equal to or greater than the recent 10-year average for that fishery. If the set gillnet sockeye to chum salmon ratio falls below the recent 10-year average in either fishery, that fishery will be closed for one period. From June 10 through June 24, daily fishing periods for set gillnet gear will be from 6:00 AM until 10:00 PM.	
	Purse seine and drift gillnet fishing periods through June 24 will occur at the same time in the South Unimak and Shumagin Islands fisheries.	
	After June 24, in either the South Unimak or Shumagin Islands fishery if the ratio of sockeye to chum salmon by all gear combined is two to one or less on any day, the next fishing period shall be of six hours duration for all gear in that fishery. If the sockeye to chum salmon ratio is two or greater, a six hour fishing period can be extended to a maximum of 16 hours. The South Unimak or Shumagin Islands fishery shall close for all gear groups is the ratio of sockeye to chum salmon is two to one or less for two consecutive fishing periods.	

[a] Both fisheries were closed in 1973 by emergency order during June 25-28 because of indications of the Bristol Bay run being below escapement requirements.
[b] Each sockeye allocation is broken down into time period guideline harvest levels.

Table 5. South Unimak June fishery commercial sockeye salmon harvests in number of fish and percent by gear type and year, 1970-2003.

	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	717,189	47.5	784,956	52.0	8,228	0.5	1,510,373
1971	107,075	25.3	315,685	74.7	0	0.0	422,760
1972	53,173	12.5	373,618	87.5	8	0.0	426,799
1973	21,364	9.6	200,258	90.2	502	0.2	222,124
1974 [a]	0	0.0	0	0.0	0	0.0	0
1975	43,703	22.9	146,918	77.0	153	0.1	190,774
1976	40,334	17.4	190,256	82.2	978	0.4	231,568
1977	29,698	15.2	164,165	84.3	944	0.5	194,807
1978	77,221	18.4	339,295	81.0	2,419	0.6	418,935
1979	474,381	70.6	196,482	29.2	1,349	0.2	672,212
1980	2,086,038	76.4	631,975	23.1	13,135	0.5	2,731,148
1981	745,747	50.7	693,166	47.1	31,480	2.1	1,470,393
1982	902,804	54.1	745,616	44.7	19,733	1.2	1,668,153
1983	935,003	60.5	599,152	38.8	10,920	0.7	1,545,075
1984	716,685	63.3	403,582	35.7	11,098	1.0	1,131,365
1985	891,775	61.3	553,558	38.0	9,636	0.7	1,454,969
1986	147,380	56.7	162,950	51.7	5,040	1.6	315,370
1987	238,193	36.5	401,215	61.5	12,989	2.0	652,397
1988	141,410	29.8	317,818	67.0	15,229	3.2	474,457
1989	800,949	59.4	512,522	38.0	34,076	2.5	1,347,547
1990 [b]	619,391	56.9	452,484	41.6	17,069	1.6	1,088,944
1991	650,461	53.5	539,490	44.4	25,707	2.1	1,215,658
1992	1,192,202	58.3	765,752	37.4	88,068	4.3	2,046,022
1993	1,397,481	59.1	902,788	38.1	66,304	2.8	2,366,573
1994	573,247	57.3	371,103	37.1	56,900	5.7	1,001,250
1995	611,453	42.1	792,940	54.6	47,097	3.2	1,451,490
1996	127,366	22.2	421,882	73.7	23,247	4.1	572,495
1997	174,536	14.8	896,638	76.0	108,005	9.2	1,179,179
1998	70,263	7.2	856,265	87.9	48,100	4.9	974,628
1999	232,779	21.0	836,876	75.7	36,553	3.3	1,106,208
2000	114,831	12.9	722,855	81.0	54,330	6.1	892,016
2001	17,159	14.1	95,547	78.6	8,841	7.3	121,547
2002	72,569	20.4	254,657	71.5	28,931	8.1	356,157
2003	58,813	17.5	245,657	73.1	31,433	9.4	335,903
1970-1978 Average	121,084	30.1	279,461	69.5	1,470	0.4	402,015
1979-1994 Average	782,072	59.1	515,603	38.9	26,171	2	1,323,846
1995-2003 Average	164,419	21.2	569,257	73.3	42,949	5.5	776,625

[a] No fishery because forecast was less than escapement requirements for Bristol Bay.
[b] Gear depth limitations in effect beginning in 1990.

Table 6. South Unimak June fishery commercial chum salmon harvests in number of fish and percent by gear type and year, 1970-2003.

	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	121,214	31.0	269,476	68.8	878	0.2	391,568
1971	79,044	19.5	326,267	80.5	0	0.0	405,311
1972	38,365	9.3	372,635	90.7	0	0.0	411,000
1973	11,746	6.6	165,753	93.3	221	0.1	177,720
1974 [a]	0	0.0	0	0.0	0	0.0	0
1975	18,833	28.9	46,446	71.1	0	0.0	65,279
1976	47,623	14.2	288,300	85.8	238	0.1	336,161
1977	9,852	10.5	84,052	89.3	193	0.2	94,097
1978	10,210	9.9	93,115	90.0	88	0.1	103,413
1979	19,007	30.1	44,051	69.8	92	0.1	63,150
1980	363,360	79.2	94,900	20.7	239	0.1	458,499
1981	323,817	63.5	184,586	36.2	1,473	0.3	509,876
1982	430,661	46.1	501,282	53.7	1,785	0.2	933,728
1983	405,903	65.9	209,600	34.0	851	0.1	616,354
1984	137,110	60.2	90,498	39.7	305	0.1	227,913
1985	125,813	38.7	198,361	61.1	651	0.2	324,825
1986	110,666	43.8	141,299	55.9	756	0.3	252,721
1987	155,447	38.3	247,934	61.1	2,574	0.6	405,955
1988	155,895	33.5	305,967	65.8	2,903	0.6	464,765
1989	212,310	52.1	192,650	47.3	2,675	0.7	407,635
1990 [b]	263,532	57.9	190,002	41.8	1,510	0.3	455,044
1991	410,034	61.2	256,132	38.2	3,937	0.6	670,103
1992	204,717	63.2	115,401	35.6	3,773	1.2	323,891
1993	252,798	66.2	120,820	31.6	8,323	2.2	381,941
1994	239,286	63.9	129,530	34.6	5,593	1.5	374,409
1995	161,199	47.1	172,715	50.5	8,393	2.5	342,307
1996	41,516	32.0	86,103	66.3	2,270	1.7	129,889
1997	58,999	30.1	127,646	65.1	9,371	4.8	196,016
1998	26,777	13.7	162,566	83.2	6,111	3.1	195,454
1999	52,314	28.0	128,723	68.9	5,849	3.1	186,886
2000	46,728	27.7	114,812	68.0	7,348	4.4	168,888
2001	5,701	15.8	28,651	79.4	1,747	4.8	36,099
2002	46,036	22.9	145,079	72.1	10,096	5.0	201,211
2003	23,435	19.3	92,730	76.5	5,004	4.1	121,169
1970-1978 Average	37,432	17	182,894	82.9	179	0.1	220,505
1979-1994 Average	238,147	55.5	188,938	44	2,340	0.5	429,425
1995-2003 Average	51,412	29.3	117,669	67.1	6,243	3.6	175,324

[a] No fishery because forecast was less than escapement requirement for Bristol Bay.
[b] Gear depth limitations in effect beginning in 1990.

Table 7. Shumagin Islands June fishery commercial sockeye salmon harvests in number of fish and percent by gear type and year, 1970-2003.

	Purse Seine		Set Gillnet		
Year	Number	Percent	Number	Percent	Total
1970	128,408	91.9	11,327	8.1	139,735
1971	35,176	89.4	4,165	10.6	39,341
1972	72,069	96.9	2,329	3.1	74,398
1973	20,047	87.3	2,917	12.7	22,964
1974 [a]	0	0.0	0	0.0	0
1975	48,065	97.4	1,260	2.6	49,325
1976	68,755	95.5	3,261	4.5	72,016
1977	43,579	94.9	2,333	5.1	45,912
1978	65,826	97.0	2,050	3.0	67,876
1979	165,605	92.4	13,534	7.6	179,139
1980	458,069	96.4	17,058	3.6	475,127
1981	332,300	94.8	18,272	5.2	350,572
1982	438,420	97.3	12,128	2.7	450,548
1983	405,757	97.4	10,737	2.6	416,494
1984	243,136	94.7	13,702	5.3	256,838
1985	318,878	94.8	17,553	5.2	336,431
1986	132,580	85.0	23,447	15.0	156,027
1987	106,799	76.0	33,768	24.0	140,567
1988	203,391	72.1	78,839	27.9	282,230
1989	360,860	90.9	36,098	9.1	396,958
1990 [b]	217,968	85.3	37,617	14.7	255,585
1991	268,539	80.6	64,733	19.4	333,272
1992	374,258	90.9	37,576	9.1	411,834
1993	531,258	87.5	75,913	12.5	607,171
1994	346,923	75.4	113,090	24.6	460,013
1995	532,952	81.5	120,879	18.5	653,831
1996	342,317	75.0	114,158	25.0	456,475
1997	338,803	75.5	110,199	24.5	449,002
1998	155,216	49.4	158,881	50.6	314,097
1999	200,108	74.3	69,083	25.7	269,191
2000	277,974	77.4	81,238	22.6	359,212
2001	24,705	84.9	4,380	15.1	29,085
2001	24,705	84.9	4,380	15.1	29,085
2002	180,135	76.7	54,814	23.3	234,949
2003	82,608	70.5	34,636	29.5	117,244
1970-1985 Average	177,756		8,289		186,045
1986-2003 Average	247,479		65,986		313,465

[a] No fishery because forecast was less than escapement requirements for Bristol Bay.
[b] Gear depth limitations in effect beginning in 1990.

Table 8. Shumagin Islands June fishery commercial chum salmon harvests in number of fish and percent by gear type and year, 1970-2003.

	Purse Seine		Set Gillnet		
Year	Number	Percent	Number	Percent	Total
1970	42,226	94.0	2,683	6.0	44,909
1971	100,544	96.8	3,342	3.2	103,886
1972	106,239	98.5	1,571	1.5	107,810
1973	21,605	94.3	1,305	5.7	22,910
1974 [a]	0	0.0	0	0.0	0
1975	34,614	97.4	929	2.6	35,543
1976	71,946	97.1	2,163	2.9	74,109
1977	21,678	99.0	221	1.0	21,899
1978	17,793	96.3	686	3.7	18,479
1979	39,196	95.7	1,757	4.3	40,953
1980	48,990	97.3	1,376	2.7	50,366
1981	53,351	98.7	720	1.3	54,071
1982	159,518	98.9	1,798	1.1	161,316
1983	168,618	99.6	659	0.4	169,277
1984	108,495	99.3	712	0.7	109,207
1985	104,619	96.0	4,385	4.0	109,004
1986	94,080	95.0	4,968	5.0	99,048
1987	34,617	93.4	2,447	6.6	37,064
1988	51,154	82.6	10,792	17.4	61,946
1989	44,498	93.6	3,030	6.4	47,528
1990 [b]	59,111	93.1	4,390	6.9	63,501
1991	95,756	93.3	6,846	6.7	102,602
1992	98,509	96.3	3,803	3.7	102,312
1993	147,160	97.9	3,146	2.1	150,306
1994	200,577	96.5	7,179	3.5	207,756
1995	182,894	93.7	12,232	6.3	195,126
1996	220,449	95.9	9,482	4.1	229,931
1997	118,418	93.8	7,891	6.2	126,309
1998	39,464	78.7	10,701	21.3	50,165
1999	54,439	93.2	3,981	6.8	58,420
2000	66,580	94.5	3,889	5.5	70,469
2001	11,402	93.1	849	6.9	12,251
2002	168,405	94.8	9,201	5.2	177,606
2003	154,446	95.8	6,824	4.2	161,267
1970-1985 Average	68,715	97.8	1,519	2.2	70,234
1986-2003 Average	102,331	94.3	6,203	5.7	108,534

[a] No fishery due to forecast of less than escapement requirements for Bristol Bay.

[b] Gear depth limitations in effect beginning in 1990.

Table 9. South Unimak and Shumagin Islands June sockeye and chum salmon daily harvests, 2003.

	South Unimak		Shumagin Islands		Combined	
Date	Sockeye	Chum	Sockeye	Chum	Sockeye	Chum
June1-9	Fishery Closed		Fishery Closed			
10	80,017	19,651	3,979	4,223	83,996	23,874
11	Fishery Closed		Fishery Closed			
12	52,996	24,881	5,838	5,360	58,834	30,241
13	Fishery Closed		Fishery Closed			
14	57,339	29,439	8,425	4,619	65,764	34,058
15	Fishery Closed		Fishery Closed			
16 [a]	2,495	542	5,162	1,025 [a]	7,657	1,567
17	47,488	18,532	17,865	43,228	65,353	61,760
18 [a]	6,166	658	Fishery Closed		6,166	658
19	42,547	10,308	11,738	39,220	54,285	49,528
20 [a]	5,255	575	Fishery Closed		5,255	575
21	22,112	6,531	17,828	28,810	39,940	35,341
22 [a]	1,970	283	Fishery Closed		1,970	283
23 [a]	Fishery Closed		1,451	433 [a]	1,451	433
24	7,018	4,038	13,561	11,868	20,579	15,906
25	Fishery Closed		Fishery closed			
26	8,249	4,118	25,210	18,902	33,459	23,020
27	Fishery Closed		Fishery closed			
28	2,251	1,613	6,187	3,581	8,438	5,194
29	Fishery Closed		Fishery closed			
30	Fishery Closed		Fishery closed			
Total	335,903	121,169	117,244	161,269	453,147	282,438

[a] Set gillnet only fishing period.

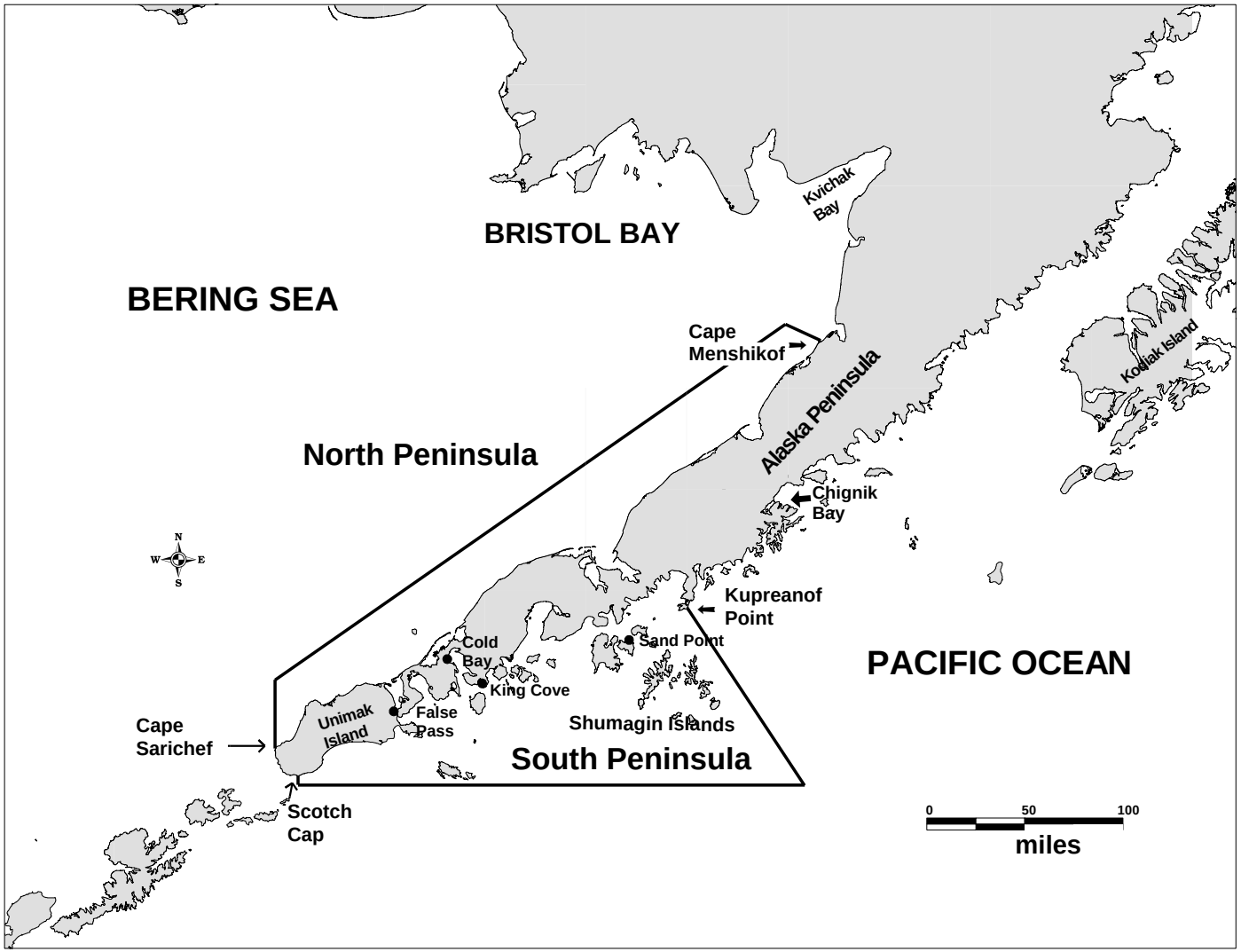

Figure 1. The Alaska Peninsula Management Area, denoting the North and South Peninsula.

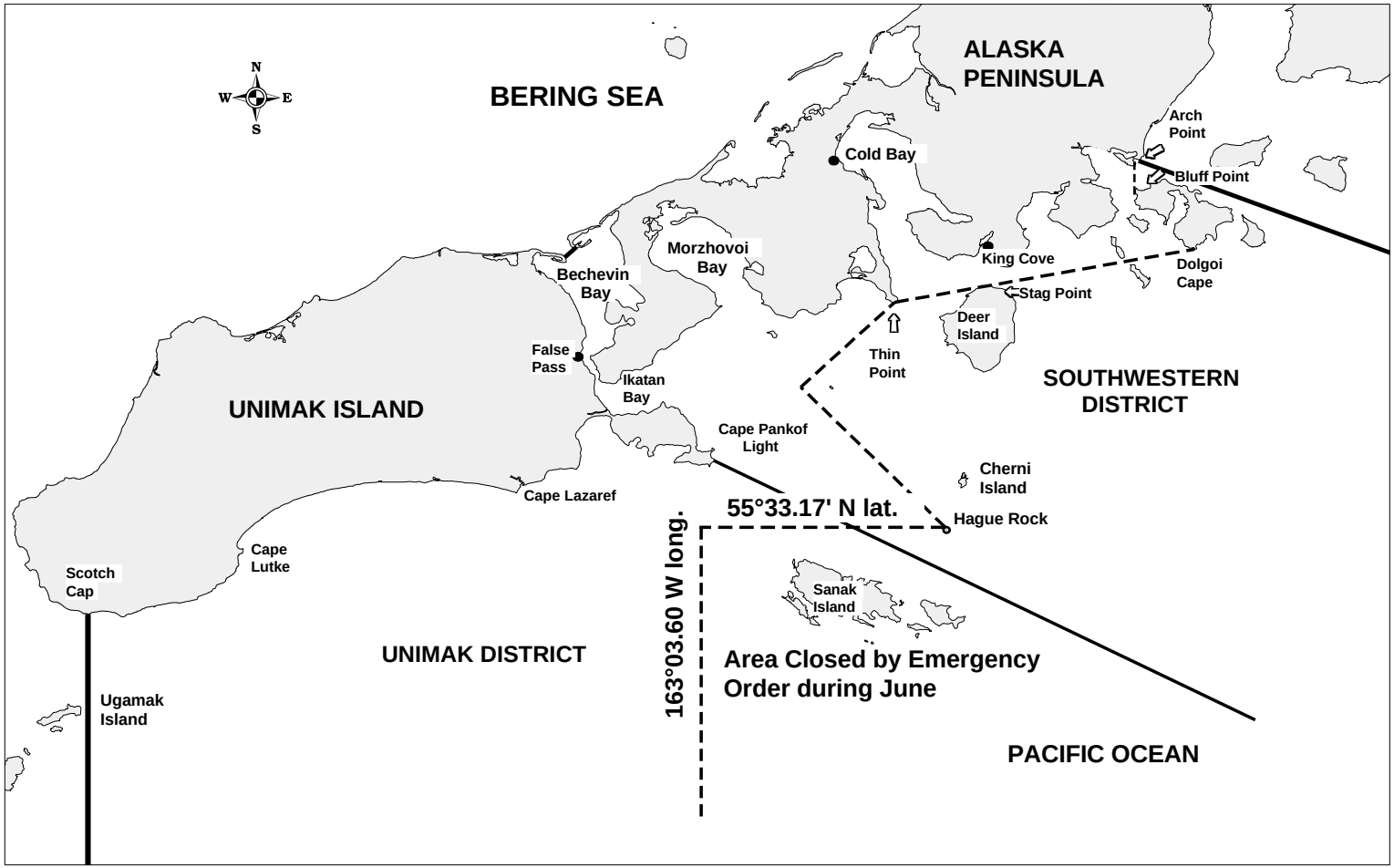

Figure 2. Map of the South Unimak June fishery.

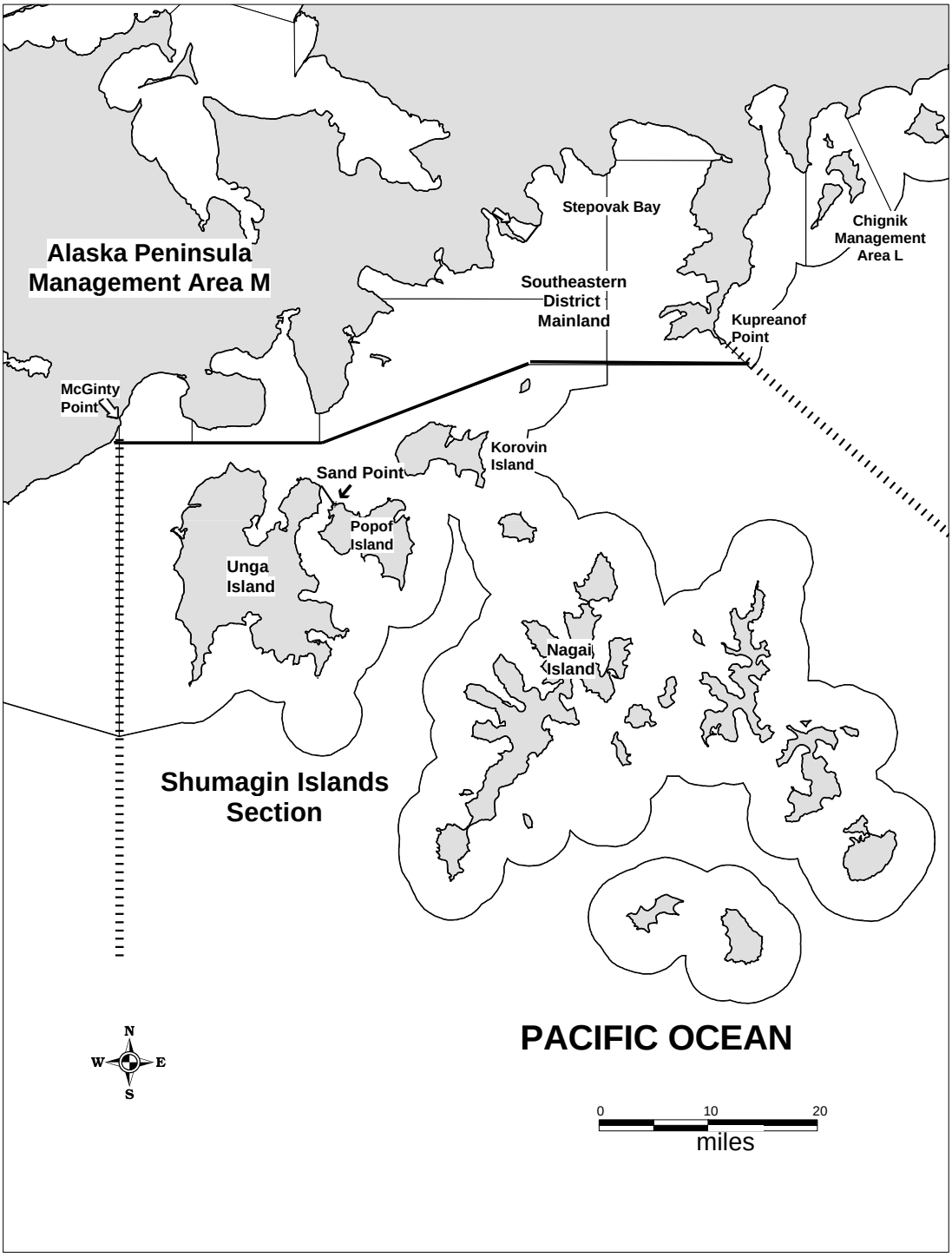

Figure 3. Map of the Shumagin Islands Section.

APPENDIX

Appendix A.1. South Unimak and Shumagin Islands June salmon harvest, in number of fish by species, 1970-2003.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total[a]
1970	1,016	1,650,108	48	103,053	436,477	2,190,702
1971	828	462,101	1	19,240	509,197	991,367
1972	642	501,197	20	17,924	518,810	1,038,593
1973	247	245,088	28	19,430	200,630	465,423
1974	0	0	0	0	0	0
1975	117	240,099	1	5,247	100,822	346,286
1976	2,132	303,584	3	23,824	410,270	739,813
1977	521	240,719	0	5,398	115,996	362,634
1978	534	486,811	3	89,942	121,892	699,182
1979	1,050	851,351	290	154,813	104,103	1,111,607
1980	3,193	3,206,275	853	1,526,306	508,865	5,245,492
1981	5,672	1,820,965	320	451,250	563,947	2,842,154
1982	7,131	2,118,701	1,241	1,718,825	1,095,044	4,940,942
1983	13,456	1,961,569	4	55,875	785,631	2,816,535
1984	3,854	1,388,203	14	919,876	337,120	2,649,067
1985	5,777	1,791,400	2,468	106,615	433,829	2,340,089
1986	1,895	471,397	2	291,989	351,769	1,117,052
1987	5,163	792,964	380	16,982	443,019	1,258,508
1988	4,064	756,687	255	180,224	526,711	1,467,941
1989	2,758	1,744,505	0	199,235	455,163	2,401,661
1990	10,332	1,344,529	1	515,047	518,545	2,388,454
1991	4,473	1,548,930	12	619,137	772,705	2,945,257
1992	3,760	2,457,856	4	642,090	426,203	3,529,913
1993	9,466	2,973,744	1,233	81,136	532,247	3,597,826
1994	7,590	1,461,263	1,579	2,492,514	582,165	4,545,111
1995	14,747	2,105,321	6,042	178,635	537,433	2,842,178
1996	2,845	1,028,970	13,219	377,684	359,820	1,782,538
1997	5,811	1,628,181	560	605,937	322,325	2,562,814
1998	2,696	1,288,725	476	474,340	245,619	2,011,856
1999	3,051	1,375,399	2	30,539	245,306	1,654,297
2000	2,849	1,251,228	304	360,029	239,357	1,853,767
2001	345	150,632	2	39,251	48,350	238,580
2002	2,443	591,106	4	76,251	378,817	1,048,621
2003	1,318	453,147	153	217,900	282,438	954,956
1970-1979 Average	709	498,106	39	43,887	251,820	794,560
1980-1989 Average	5,296	1,605,267	554	546,718	550,110	2,707,944
1990-2000 Average	6,147	1,678,559	2130	567,092	434,702	2,688,630
2002-2003 Average[b]	1,881	522,127	79	147,076	330,628	1,001,789

[a] Numbers of salmon do not include test fish catches.
[b] Averages do not include 2001 because of a lengthy strike.

Appendix A.2. South Unimak June salmon harvest, in number of fish by species, 1970- 2003.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total[a]
1970	868	1,510,373	46	83,325	391,568	1,986,180
1971	549	422,760	0	11,608	405,311	840,228
1972	400	426,799	4	11,906	411,000	852,081
1973	145	222,124	11	11,152	177,720	411,152
1974	0	0	0	0	0	0
1975	101	190,774	1	3,205	65,279	259,360
1976	1,827	231,568	3	18,181	336,161	587,740
1977	393	194,807	0	3,397	94,097	292,694
1978	267	418,935	3	47,380	103,413	569,998
1979	575	672,212	38	49,000	63,150	784,975
1980	2,927	2,731,148	853	1,140,611	458,499	4,334,038
1981	4,455	1,470,393	83	325,002	509,876	2,309,809
1982	5,577	1,668,153	1,241	1,032,154	933,728	3,640,853
1983	8,179	1,545,075	1	40,441	616,354	2,210,050
1984	2,024	1,131,365	0	470,688	227,913	1,831,990
1985	4,101	1,454,969	2	69,811	324,825	1,853,708
1986	1,363	315,370	1	150,674	252,721	720,129
1987	4,017	652,397	380	11,342	405,955	1,074,091
1988	2,125	474,457	11	86,678	464,765	1,028,036
1989	2,263	1,347,547	0	154,168	407,635	1,911,613
1990	8,464	1,088,944	1	444,249	455,044	1,996,702
1991	3,066	1,215,658	5	500,922	670,103	2,389,754
1992	2,373	2,046,022	3	501,127	323,891	2,873,416
1993	4,587	2,366,573	506	37,735	381,941	2,791,342
1994	4,468	1,001,250	1,271	1,731,741	374,409	3,113,139
1995	7,850	1,451,490	5,102	119,094	342,307	1,925,843
1996	1,228	572,495	11,730	146,799	129,889	862,141
1997	3,041	1,179,179	501	332,262	196,016	1,710,999
1998	1,259	974,628	312	125,906	195,454	1,297,559
1999	2,258	1,106,208	1	20,302	186,886	1,315,655
2000	2,064	892,016	303	210,521	168,888	1,273,792
2001	134	121,547	2	31,812	36,099	189,594
2002	433	356,157	3	33,789	201,211	591,593
2003	373	335,903	14	90,161	121,169	547,620
1970-1979 Average	513	429,035	11	23,915	204,770	658,244
1980-1989 Average	3,703	1,279,087	257	348,157	460,227	2,091,432
1990-2000 Average	3,696	1,263,133	1,794	379,151	311,348	1,959,122
2002-2003 Average[b]	403	346,030	9	61,975	161,190	569,607

[a] Numbers of salmon do not include test fish catches.
[b] Averages do not include 2001 because of a lengthy strike.

Appendix A.3. Shumagin Islands June salmon harvest, in number of fish by species, 1970-2003.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total[a]
1970	148	139,735	2	19,728	44,909	204,522
1971	279	39,341	1	7,632	103,886	151,139
1972	242	74,398	16	6,018	107,810	188,484
1973	102	22,964	17	8,278	22,910	54,271
1974	0	0	0	0	0	0
1975	16	49,325	0	2,042	35,543	86,926
1976	305	72,016	0	5,643	74,109	152,073
1977	128	45,912	0	2,001	21,899	69,940
1978	267	67,876	0	42,562	18,479	129,184
1979	475	179,139	252	105,813	40,953	326,632
1980	266	475,127	0	385,695	50,366	911,454
1981	1,217	350,572	237	126,248	54,071	532,345
1982	1,554	450,548	0	686,671	161,316	1,300,089
1983	5,277	416,494	3	15,434	169,277	606,485
1984	1,830	256,838	14	449,188	109,207	817,077
1985	1,676	336,431	2,466	36,804	109,004	486,381
1986	532	156,027	1	141,315	99,048	396,923
1987	1,146	140,567	0	5,640	37,064	184,417
1988	1,939	282,230	244	93,546	61,946	439,905
1989	495	396,958	0	45,067	47,528	490,048
1990	1,868	255,585	0	70,798	63,501	391,752
1991	1,407	333,272	7	118,215	102,602	555,503
1992	1,387	411,834	1	140,963	102,312	656,497
1993	4,879	607,171	727	43,401	150,306	806,484
1994	3,122	460,013	308	760,773	207,756	1,431,972
1995	6,897	653,831	940	59,541	195,126	916,335
1996	1,617	456,475	1,489	230,885	229,931	920,397
1997	2,770	449,002	59	273,675	126,309	851,815
1998	1,437	314,097	164	348,434	50,165	714,297
1999	793	269,191	1	10,237	58,420	338,642
2000	785	359,212	1	149,508	70,469	579,975
2001	211	29,085	0	7,439	12,251	48,986
2002	2,010	234,949	1	42,462	177,606	457,028
2003	945	117,244	139	127,739	161,267	407,334
1970-1979 Average	196	69,071	29	19,972	47,050	136,317
1980-1989 Average	1,593	326,179	297	198,561	89,883	616,513
1990-2000 Average	2,451	415,426	336	200,585	123,354	742,152
2002-2003 Average[b]	1,478	176,097	70	85,101	169,437	432,181

[a] Numbers of salmon do not include test fish catches.
[b] Averages do not include 2001 because of a lengthy strike.

Appendix A.4. South Unimak and Shumagin Islands June sockeye salmon allocations and harvests, 1975 and 2000.

	South Unimak		Shumagin Islands		Total	
Year	Allocation	Harvest	Allocation	Harvest	Allocation	Harvest
1975	165,000	190,774	50,000	49,325	215,000	240,099
1976	350,000	233,211	75,000	72,016	425,000	305,227
1977	195,000	195,680	42,000	45,912	237,000	241,592
1978	428,000	418,959	94,000	67,876	522,000	486,835
1979	900,000	672,293	200,000	179,139	1,100,000	851,432
1980	2,513,000	2,731,148	555,000	475,127	3,068,000	3,206,275
1981	1,442,000	1,470,563	318,000	350,572	1,760,000	1,821,135
1982	1,850,000	1,668,153	408,000	450,548	2,258,000	2,118,701
1983	1,469,000	1,547,369	324,000	416,494	1,793,000	1,963,863
1984	1,111,000	1,131,365	245,000	256,838	1,356,000	1,388,203
1985	1,380,000	1,454,969	305,000	336,431	1,685,000	1,791,400
1986	907,000	315,370	200,000	156,027	1,107,000	471,397
1987	635,000	653,536	140,000	140,567	775,000	794,103
1988	1,263,000	474,457	279,000	282,230	1,542,000	765,687
1989	1,199,000	1,347,547	264,000	396,958	1,463,000	1,744,505
1990	1,087,000	1,090,710	240,000	255,585	1,327,000	1,344,529
1991	1,573,000	1,215,658	347,000	333,272	1,920,000	1,548,930
1992	1,959,000	2,046,022	432,000	411,834	2,391,000	2,457,856
1993	2,375,000	2,366,573	524,000	607,171	2,899,000	2,973,744
1994	2,938,000	1,001,250	648,000	460,013	3,586,000	1,461,263
1995	2,987,000	1,451,490	659,000	653,831	3,646,000	2,105,321
1996	2,564,000	572,495	566,000	456,475	3,130,000	1,028,970
1997	1,840,000	1,179,179	406,000	449,002	2,246,000	1,628,181
1998	1,529,000	974,628	336,000	314,097	1,865,000	1,288,725
1999	1,024,000	1,106,208	226,000	269,191	1,250,000	1,375,399
2000	1,650,000	892,016	363,000	359,212	2,013,000	1,251,228

Appendix A.5. South Unimak and Shumagin Islands June fisheries, sockeye salmon allocations versus actual harvest and allocations if Bristol Bay runs were perfectly forecasted, 1975-2003.

Year	S. Unimak-Shumagin Islands Guideline Harvest Level (GHL)	Actual S. Unimak-Shumagin Is. Harvest[a]	Actual Bristol Bay Harvest	Combined Bristol Bay & S. Unimak-Shumagin Harvest	S. Unimak-Shumagin GHL % of Combined Bristol Bay & S. Unimak-Shumagin Harvest[b]	South Unimak-Shumagin Island Harvest % of the Combined Bristol B. & S. Unimak-Shumagin Island Harvest [b]	S. Unimak Shumagin Is. GHL if Actual Bristol Bay Harvest Was Forecasted[b]
1975	215,000	240,099	4,898,814	5,138,913	4.18	4.67	427,000
1976	425,000	303,584	5,619,292	5,922,876	7.18	5.13	492,000
1977	237,000	240,719	4,877,880	5,118,599	4.63	4.70	425,000
1978	522,000	486,811	9,928,139	10,414,950	5.01	4.67	864,000
1979	1,100,000	851,351	21,428,606	22,279,957	4.94	3.82	1,849,000
1980[c]	3,068,000	3,206,275	23,761,746	26,968,021	11.38	11.89	2,238,000
1981	1,760,000	1,820,965	25,603,081	27,424,046	6.42	6.64	2,276,000
1982	2,258,000	2,118,701	15,104,391	17,223,092	13.11	12.30	1,430,000
1983	1,793,000	1,961,569	37,372,031	39,333,600	4.56	4.99	3,265,000
1984	1,356,000	1,388,203	24,710,306	26,098,509	5.20	5.32	2,166,000
1985	1,685,000	1,791,400	23,702,883	25,494,283	6.61	7.03	2,116,000
1986[d]	1,107,000	471,397	15,776,056	16,247,453	6.81	2.90	1,349,000
1987	775,000	792,964	16,068,775	16,861,739	4.60	4.71	1,400,000
1988[d]	1,542,000	756,687	13,989,757	14,746,444	10.46	5.13	1,224,000
1989	1,463,000	1,744,505	28,735,306	30,479,811	4.80	5.72	2,530,000
1990	1,327,000	1,346,529	33,523,127	36,196,656	3.81	3.86	2,894,000
1991[d]	1,920,000	1,548,930	25,821,180	27,370,110	7.01	5.66	2,272,000
1992	2,391,000	2,457,856	31,879,676	34,337,532	6.96	7.16	2,850,000
1993	2,899,000	2,973,744	40,462,124	43,435,868	6.67	6.85	3,605,100
1994	3,586,000	1,461,263	35,224,050	36,685,313	9.78	3.98	3,045,000
1995	3,646,000	2,105,321	44,266,217	46,371,538	7.86	4.54	3,849,000
1996	3,130,000	1,028,970	29,588,297	30,679,270	10.20	3.35	2,546,000
1997	2,246,000	1,628,181	12,309,000	13,937,181	16.20	11.68	1,157,000
1998	1,865,000	1,288,725	10,035,601	11,324,326	16.47	11.38	939,919
1999	1,250,000	1,375,399	25,824,286	27,199,685	4.60	5.06	2,257,573
2000	2,013,000	1,251,228	20,532,315	21,783,543	9.24	5.74	1,808,034
2001[e,f]		150,632	14,033,574	14,184,206		1.06	
2002[f]		591,106	10,650,045	11,241,151		5.26	
2003[f]		453,147	14,866,000	15,319,147		2.96	
2002-2003, % of commercial harvest taken by SP June fishery						**4.09**	

-Continued-

[a] Salmon numbers exclude test fish harvests.

[b] These values were calculated by adding the actual Bristol Bay sockeye salmon harvest and the South Unimak and Shumagin Islands June sockeye salmon harvests and calculating the appropriate percentages. Calculations assume all sockeye salmon caught at South Unimak and the Shumagin Islands are destined for Bristol Bay.

[c] The 1980 Bristol Bay sockeye salmon catch would have been much larger had it not been for a lengthy strike.

[d] Sockeye salmon allocations were not reached largely, if not totally, due to a chum cap.

[e] The 2001 South Unimak and Shumagin Islands sockeye salmon harvest would have been much larger had it not been for a lengthy strike.

[f] Sockeye salmon allocations no longer in effect, 2001-2003 numbers represent what percent of the Bristol Bay destined harvest was taken in the South Unimak and Shumagin Islands June fisheries under the present management.

Appendix A.6. South Unimak and Shumagin Islands June fisheries, number of fishing days and hours open to commercial fishing by year and gear, 1975-2003.

	South Unimak[ab]				Shumagin Islands[ab]			
	Set Gillnet		Drift and Seine		Set Gillnet		Seine	
Year	Days	Hours	Days	Hours	Days	Hours	Days	Hours
1975	10	240	10	240	9	207	9	207
1976 [c]	19	456	19	456	13	312	13	312
1977	17	408	17	408	11	264	11	264
1978	23	552	23	552	23	552	23	552
1979 [d]	33	786	33	786	27	642	27	642
1980	30	720	30	720	30	720	30	720
1981	24	576	24	576	22	528	22	528
1982	30	720	30	720	24	576	24	576
1983	11	264	11	264	10	228	10	228
1984	5	110	5	110	6	134	6	134
1985	9	144	9	144	9	140	9	140
1986	8	148	8	148	8	160	8	160
1987	12	224	12	224	6	92	6	92
1988	8	112	8	112	9	153	9	153
1989	5	84	5	84	4	72	4	72
1990	13	281	13	281	9	200	9	200
1991	8	161	8	161	5	88	5	88
1992	8	139	8	139	5	42.5	5	42.5
1993	10	176	10	176	7	131	7	131
1994	14	281	14	262	13	262	13	249
1995	18	378	18	370	17	347	17	341
1996	16	378	16	372	13	306	13	276
1997	18	418	18	418	14	281	14	235
1998	18	424	18	424	18	418	16	344
1999	11	234	10	217	6	127	6	127
2000	18	426	18	426	8	176	8	176
2001 [e]								
2002	11	176	9	144	10	150	9	134
2003	12	192	9	144	10	150	9	134
Average 1992-2000	14	302	14	297	11	218	10	201
Average 2002-2003	12	184	9	144	10	150	9	134

[a] From 1992-2000, set gillnet gear was guaranteed 16 hours per fishing period regardless of the other gear types. Starting in 2001, set net fishing periods after June 24 could vary in length to be 16 hours in but were guaranteed length in the earlier part of the season.

[b] Prior to 1996, openings in the Cape Lutke Section were not synchronous with periods elsewhere in the South Unimak Fishery. Fishing time in those years was listed as anytime fishing occurred anywhere in the fishery.

[c] In 1976, the South Unimak fishery was extended through July 1 to compensate for fishing time lost at the end of June due to adverse weather conditions.

[d] In 1979, the South Unimak fishery was extended through July 3 to compensate for fishing time lost at the end of June due to adverse weather conditions.

[e] Due to lengthy price negotiations and changes in the management plan in 2001, fishing effort was absent during many of the open fishing periods. This makes comparisons of fishing time with past years, in this format, invalid.

Appendix A.7. South Unimak and Shumagin Islands June fisheries, sockeye per chum salmon ratio by gear type, 1970-2003.

	South Unimak				Shumagin islands		
Year	Purse Seine	Drift Gillnet	Set Gillnet	Total	Purse Seine	Set Gillnet	Total
1970	5.7	2.9	9.4	3.8	3.0	4.2	3.1
1971	1.4	1.0	0.0	1.0	0.3	0.0	0.4
1972	1.4	1.0	0.4	1.0	0.7	1.5	0.7
1973	1.8	1.2	4.4	1.3	0.9	2.2	1.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	2.3	3.2	0.0	2.9	1.4	0.0	1.4
1976	0.8	0.7	8.3	0.7	1.0	1.5	1.0
1977	3.0	2.0	5.8	2.1	2.0	10.6	2.1
1978	7.6	3.6	23.5	4.1	3.7	3.0	3.7
1979	25.0	4.5	15.1	10.6	4.2	7.7	4.4
1980	5.7	6.7	55.0	6.0	9.4	12.4	9.4
1981	2.3	3.8	21.0	2.9	6.2	25.4	6.5
1982	2.1	1.5	11.1	1.8	2.7	6.7	2.8
1983	2.3	2.9	14.9	2.5	2.4	16.3	2.5
1984	5.2	4.5	36.4	5.0	2.2	19.2	2.4
1985	7.1	2.8	14.8	4.3	3.0	4.0	3.1
1986	1.3	1.2	6.7	1.2	1.4	4.7	1.6
1987	1.5	1.6	5.2	1.6	3.1	13.8	3.8
1988	0.9	1.0	5.2	1.0	4.0	7.3	4.6
1989	3.8	2.7	12.7	3.3	8.1	11.9	8.4
1990 [a]	2.4	2.4	11.3	3.5	3.7	8.6	4.0
1991 [a]	1.6	2.1	6.5	1.8	2.8	9.5	3.2
1992 [a]	5.8	6.6	23.3	6.3	3.8	9.9	4.0
1993 [a]	5.5	7.5	8.0	6.2	3.6	24.1	4.0
1994 [a]	2.4	2.9	10.2	2.7	1.7	15.8	2.2
1995 [a,b]	3.8	4.6	5.6	4.2	2.9	9.9	3.4
1996 [a,b]	3.1	4.9	10.2	4.4	1.6	12.0	2.0
1997 [a,b]	3.0	7.0	11.5	6.0	2.9	14.0	3.6
1998 [a,b]	2.6	5.3	7.9	5.0	3.9	14.8	6.3
1999 [a,b]	4.4	6.5	6.2	5.9	3.7	17.4	4.6
2000 [a,b]	2.5	6.3	7.4	5.1	4.2	20.9	5.1
2001 [a,b]	3.0	3.3	5.1	3.4	2.2	5.2	2.4
2002 [a,b]	1.6	1.8	2.9	1.8	1.1	6.0	1.3
2003 [a,b]	2.5	2.6	6.3	2.8	0.5	5.1	0.7
1970-1989 Average	4.1	2.4	12.5	2.9	3.0	7.6	3.1
1990-1994 Average	3.5	4.3	11.9	4.1	3.1	13.6	3.5
1995-2003 Average	2.9	4.7	7.0	4.3	2.6	11.7	3.3

[a] Gear depth limitations in effect.
[b] Gillnet mesh size restrictions eliminated.

Appendix A.8. Estimated exvessel value of the South Unimak and Shumagin Islands June fisheries, 1985-2003.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1985	175,000	12,230,000	15,000	30,000	1,185,000	13,635,000
1986	33,000	3,427,000	0	62,000	932,000	4,454,000
1987	5,580	1,300,000	14	35,000	104,753	1,445,347
1988	121,000	10,216,000	0	99,000	3,721,000	14,157,000
1989	76,000	16,712,000	0	130,000	1,530,000	18,448,000
1990	119,000	14,057,000	0	242,000	1,521,000	15,939,000
1991	65,000	7,400,000	40	1,800,000	1,200,000	10,465,040
1992	64,000	21,774,000	0	138,000	1,075,000	23,051,000
1993	126,151	13,155,634	3,013	16,250	889,534	14,190,582
1994	100,000	6,382,000	4,170	657,500	911,000	8,054,670
1995	249,000	13,515,000	13,400	36,600	935,100	14,749,100
1996	24,530	4,988,500	26,540	47,630	203,800	5,291,000
1997	47,000	8,044,000	500	81,000	163,000	8,335,500
1998	20,800	7,083,000	730	124,370	165,400	7,394,300
1999	26,000	9,131,000	3	7,455	158,100	9,322,558
2000	23,000	6,262,000	464	86,078	182,150	6,553,692
2001 [a]	1,929	462,750	2	10,667	42,216	517,564
2002	8,765	1,762,000	3	14,742	260,541	2,046,051
2003	5,580	1,300,000	14	35,000	104,753	1,445,347
1985-1995 Average	103,066	10,924,421	3,240	295,123	1,273,126	12,598,976
1996-2000 Average	28,266	7,101,700	5,647	69,307	174,490	7,379,410
2002-2003 Average	7,173	1,531,000	9	24,871	182,647	1,745,699

[a] Due to a lengthy price dispute, the 2001 figures are not comparable to other years.

Table 4. History of regulations for the South Unimak and Shumagin Islands June commercial salmon fisheries, 1962-2003.

Year	South Unimak	Shumagin Islands
1962-66	5 days per week	5 days per week
1967-70	7 days per week	7 days per week
1971-72	6:00 A.M. Monday - 6:00 A.M. Saturday	7 days per week
1973[a]	Four 13 hour fishing periods per week	Four 13 hour fishing periods per week.
1974	No fishery	No fishery
1975-83[b]	6.8% of predicted Bristol Bay catch.	1.5% of predicted Bristol Bay catch.
1984-89[b]	No more than 96 hours per 7 day period and no more than 72 hours of consecutive fishing time in each fishery (windows).	
1986[b]	6.8% allocation minus June 26-30 segment Windows No fishing before June 11	1.5% allocation minus June 26-30 segment Windows No fishing before June 11
	A 400,000 chum salmon ceiling placed on both fisheries combined.	
1987[b]	Same as during 1984-85 for both fisheries.	
1988-89[b]	6.8% of predicted Bristol Bay catch Windows	1.5% of predicted Bristol Bay catch Windows
	A 500,000 chum salmon ceiling placed on both fisheries combined.	

-Continued-

Table 4. (page 2 of 4)

Dates	South Unimak	Shumagin Islands
June 1 - 11	5%	9%
June 12 - 18	29%	28%
June 19 - 25	51%	41%
June 26 - 30	15%	22%
	100%	100%

1990-91 The chum salmon ceiling was increased from 500,000 to 600,000.

The "Window Regulations" implemented in 1984 to limit the amount of fishing time that could be allowed were deleted.

The season was delayed until June 13 and the time period sockeye allocations for both fisheries were changed as follow:

June 13-18	35%
June 19-25	45%
June 26-30	20%

The gear depth for seines was limited to 375 meshes of which mesh size may not exceed 3-1/2 inches except for the first 25 meshes above the lead line which may not exceed 7 inches.

The gear depth on gillnets along the South Peninsula was limited to no more than 90 meshes.

Seine leads may not exceed 150 fathoms for the entire Alaska Peninsula.

1992-93 The chum salmon ceiling was increased from 600,000 to 700,000 fish. Fishing time for set gillnet gear could not be less than 16 hours unless a 16 hour period would result in a harvest that exceeded the cap for chum salmon. The other regulations were the same as in effect for 1990 and 1991.

1994 Sockeye salmon time period allocations eliminated. ADF&G given flexibility to open fishery prior to June 13 if sockeye to chum salmon ratios are favorable.

-Continued-

Table 4. (page 3 of 4)

Dates	South Unimak	Shumagin Islands
1995-97	The amount of fishing time for seine and drift gillnet gear after June 24 is limited if the sockeye to chum salmon ratio is two to one or less. The Board of Fisheries stated it's intent that the remaining under the chum salmon harvest ceiling supersedes attempts to reach the sockeye guideline harvest levels. The fisheries could not be extended into July regardless of weather during late June. Fishery cannot begin prior to June 11. Removed mesh size requirements for gillnets.	
1998-00	The chum salmon ceiling was lowered from 700,000 to a "floating cap" that can range between 350,000 and 650,000. A commercial fishery for all gear types may open on June 10 if sockeye to chum salmon ratios are favorable. In the Unimak District the shoreward end of a set gillnet must be within one half mile of shore. All salmon caught must be retained and reported. Use of aircraft to locate salmon prohibited for the entire Alaska Peninsula for the entire season	
2001-present	Eliminated the sockeye salmon guideline harvest levels. Eliminated the chum salmon guideline harvest levels. Limited fishing time to no more than 16 hours per day by any gear group. Limited total fishing time by seine and drift gillnet gear to no more than 48 hours in a floating seven day period with no more than two 16-hour periods on consecutive days in any seven day period.	

-Continued-

Table 4. (page 4 of 4)

Dates	South Unimak	Shumagin Islands
	From June 10 through June 24 in the South Unimak and/or Shumagin Islands fisheries, set gillnet gear may fish on consecutive days for 16-hour periods as long as the set gillnet sockeye to chum salmon ratios in that fishery are equal to or greater than the recent 10-year average for that fishery. If the set gillnet sockeye to chum salmon ratio falls below the recent 10-year average in either fishery, that fishery will be closed for one period. From June 10 through June 24, daily fishing periods for set gillnet gear will be from 6:00 AM until 10:00 PM.	
	Purse seine and drift gillnet fishing periods through June 24 will occur at the same time in the South Unimak and Shumagin Islands fisheries.	
	After June 24, in either the South Unimak or Shumagin Islands fishery if the ratio of sockeye to chum salmon by all gear combined is two to one or less on any day, the next fishing period shall be of six hours duration for all gear in that fishery. If the sockeye to chum salmon ratio is two or greater, a six hour fishing period can be extended to a maximum of 16 hours. The South Unimak or Shumagin Islands fishery shall close for all gear groups is the ratio of sockeye to chum salmon is two to one or less for two consecutive fishing periods.	

[a] Both fisheries were closed in 1973 by emergency order during June 25-28 because of indications of the Bristol Bay run being below escapement requirements.
[b] Each sockeye allocation is broken down into time period guideline harvest levels.

Table 5. South Unimak June fishery commercial sockeye salmon harvests in number of fish and percent by gear type and year, 1970-2003.

	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	717,189	47.5	784,956	52.0	8,228	0.5	1,510,373
1971	107,075	25.3	315,685	74.7	0	0.0	422,760
1972	53,173	12.5	373,618	87.5	8	0.0	426,799
1973	21,364	9.6	200,258	90.2	502	0.2	222,124
1974 [a]	0	0.0	0	0.0	0	0.0	0
1975	43,703	22.9	146,918	77.0	153	0.1	190,774
1976	40,334	17.4	190,256	82.2	978	0.4	231,568
1977	29,698	15.2	164,165	84.3	944	0.5	194,807
1978	77,221	18.4	339,295	81.0	2,419	0.6	418,935
1979	474,381	70.6	196,482	29.2	1,349	0.2	672,212
1980	2,086,038	76.4	631,975	23.1	13,135	0.5	2,731,148
1981	745,747	50.7	693,166	47.1	31,480	2.1	1,470,393
1982	902,804	54.1	745,616	44.7	19,733	1.2	1,668,153
1983	935,003	60.5	599,152	38.8	10,920	0.7	1,545,075
1984	716,685	63.3	403,582	35.7	11,098	1.0	1,131,365
1985	891,775	61.3	553,558	38.0	9,636	0.7	1,454,969
1986	147,380	56.7	162,950	51.7	5,040	1.6	315,370
1987	238,193	36.5	401,215	61.5	12,989	2.0	652,397
1988	141,410	29.8	317,818	67.0	15,229	3.2	474,457
1989	800,949	59.4	512,522	38.0	34,076	2.5	1,347,547
1990 [b]	619,391	56.9	452,484	41.6	17,069	1.6	1,088,944
1991	650,461	53.5	539,490	44.4	25,707	2.1	1,215,658
1992	1,192,202	58.3	765,752	37.4	88,068	4.3	2,046,022
1993	1,397,481	59.1	902,788	38.1	66,304	2.8	2,366,573
1994	573,247	57.3	371,103	37.1	56,900	5.7	1,001,250
1995	611,453	42.1	792,940	54.6	47,097	3.2	1,451,490
1996	127,366	22.2	421,882	73.7	23,247	4.1	572,495
1997	174,536	14.8	896,638	76.0	108,005	9.2	1,179,179
1998	70,263	7.2	856,265	87.9	48,100	4.9	974,628
1999	232,779	21.0	836,876	75.7	36,553	3.3	1,106,208
2000	114,831	12.9	722,855	81.0	54,330	6.1	892,016
2001	17,159	14.1	95,547	78.6	8,841	7.3	121,547
2002	72,569	20.4	254,657	71.5	28,931	8.1	356,157
2003	58,813	17.5	245,657	73.1	31,433	9.4	335,903
1970-1978 Average	121,084	30.1	279,461	69.5	1,470	0.4	402,015
1979-1994 Average	782,072	59.1	515,603	38.9	26,171	2	1,323,846
1995-2003 Average	164,419	21.2	569,257	73.3	42,949	5.5	776,625

[a] No fishery because forecast was less than escapement requirements for Bristol Bay.
[b] Gear depth limitations in effect beginning in 1990.

Table 6. South Unimak June fishery commercial chum salmon harvests in number of fish and percent by gear type and year, 1970-2003.

	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	121,214	31.0	269,476	68.8	878	0.2	391,568
1971	79,044	19.5	326,267	80.5	0	0.0	405,311
1972	38,365	9.3	372,635	90.7	0	0.0	411,000
1973	11,746	6.6	165,753	93.3	221	0.1	177,720
1974 [a]	0	0.0	0	0.0	0	0.0	0
1975	18,833	28.9	46,446	71.1	0	0.0	65,279
1976	47,623	14.2	288,300	85.8	238	0.1	336,161
1977	9,852	10.5	84,052	89.3	193	0.2	94,097
1978	10,210	9.9	93,115	90.0	88	0.1	103,413
1979	19,007	30.1	44,051	69.8	92	0.1	63,150
1980	363,360	79.2	94,900	20.7	239	0.1	458,499
1981	323,817	63.5	184,586	36.2	1,473	0.3	509,876
1982	430,661	46.1	501,282	53.7	1,785	0.2	933,728
1983	405,903	65.9	209,600	34.0	851	0.1	616,354
1984	137,110	60.2	90,498	39.7	305	0.1	227,913
1985	125,813	38.7	198,361	61.1	651	0.2	324,825
1986	110,666	43.8	141,299	55.9	756	0.3	252,721
1987	155,447	38.3	247,934	61.1	2,574	0.6	405,955
1988	155,895	33.5	305,967	65.8	2,903	0.6	464,765
1989	212,310	52.1	192,650	47.3	2,675	0.7	407,635
1990 [b]	263,532	57.9	190,002	41.8	1,510	0.3	455,044
1991	410,034	61.2	256,132	38.2	3,937	0.6	670,103
1992	204,717	63.2	115,401	35.6	3,773	1.2	323,891
1993	252,798	66.2	120,820	31.6	8,323	2.2	381,941
1994	239,286	63.9	129,530	34.6	5,593	1.5	374,409
1995	161,199	47.1	172,715	50.5	8,393	2.5	342,307
1996	41,516	32.0	86,103	66.3	2,270	1.7	129,889
1997	58,999	30.1	127,646	65.1	9,371	4.8	196,016
1998	26,777	13.7	162,566	83.2	6,111	3.1	195,454
1999	52,314	28.0	128,723	68.9	5,849	3.1	186,886
2000	46,728	27.7	114,812	68.0	7,348	4.4	168,888
2001	5,701	15.8	28,651	79.4	1,747	4.8	36,099
2002	46,036	22.9	145,079	72.1	10,096	5.0	201,211
2003	23,435	19.3	92,730	76.5	5,004	4.1	121,169
1970-1978 Average	37,432	17	182,894	82.9	179	0.1	220,505
1979-1994 Average	238,147	55.5	188,938	44	2,340	0.5	429,425
1995-2003 Average	51,412	29.3	117,669	67.1	6,243	3.6	175,324

[a] No fishery because forecast was less than escapement requirement for Bristol Bay.
[b] Gear depth limitations in effect beginning in 1990.

Table 7. Shumagin Islands June fishery commercial sockeye salmon harvests in number of fish and percent by gear type and year, 1970-2003.

	Purse Seine		Set Gillnet		
Year	Number	Percent	Number	Percent	Total
1970	128,408	91.9	11,327	8.1	139,735
1971	35,176	89.4	4,165	10.6	39,341
1972	72,069	96.9	2,329	3.1	74,398
1973	20,047	87.3	2,917	12.7	22,964
1974 [a]	0	0.0	0	0.0	0
1975	48,065	97.4	1,260	2.6	49,325
1976	68,755	95.5	3,261	4.5	72,016
1977	43,579	94.9	2,333	5.1	45,912
1978	65,826	97.0	2,050	3.0	67,876
1979	165,605	92.4	13,534	7.6	179,139
1980	458,069	96.4	17,058	3.6	475,127
1981	332,300	94.8	18,272	5.2	350,572
1982	438,420	97.3	12,128	2.7	450,548
1983	405,757	97.4	10,737	2.6	416,494
1984	243,136	94.7	13,702	5.3	256,838
1985	318,878	94.8	17,553	5.2	336,431
1986	132,580	85.0	23,447	15.0	156,027
1987	106,799	76.0	33,768	24.0	140,567
1988	203,391	72.1	78,839	27.9	282,230
1989	360,860	90.9	36,098	9.1	396,958
1990 [b]	217,968	85.3	37,617	14.7	255,585
1991	268,539	80.6	64,733	19.4	333,272
1992	374,258	90.9	37,576	9.1	411,834
1993	531,258	87.5	75,913	12.5	607,171
1994	346,923	75.4	113,090	24.6	460,013
1995	532,952	81.5	120,879	18.5	653,831
1996	342,317	75.0	114,158	25.0	456,475
1997	338,803	75.5	110,199	24.5	449,002
1998	155,216	49.4	158,881	50.6	314,097
1999	200,108	74.3	69,083	25.7	269,191
2000	277,974	77.4	81,238	22.6	359,212
2001	24,705	84.9	4,380	15.1	29,085
2001	24,705	84.9	4,380	15.1	29,085
2002	180,135	76.7	54,814	23.3	234,949
2003	82,608	70.5	34,636	29.5	117,244
1970-1985 Average	177,756		8,289		186,045
1986-2003 Average	247,479		65,986		313,465

[a] No fishery because forecast was less than escapement requirements for Bristol Bay.
[b] Gear depth limitations in effect beginning in 1990.

Table 8. Shumagin Islands June fishery commercial chum salmon harvests in number of fish and percent by gear type and year, 1970-2003.

	Purse Seine		Set Gillnet		
Year	Number	Percent	Number	Percent	Total
1970	42,226	94.0	2,683	6.0	44,909
1971	100,544	96.8	3,342	3.2	103,886
1972	106,239	98.5	1,571	1.5	107,810
1973	21,605	94.3	1,305	5.7	22,910
1974 [a]	0	0.0	0	0.0	0
1975	34,614	97.4	929	2.6	35,543
1976	71,946	97.1	2,163	2.9	74,109
1977	21,678	99.0	221	1.0	21,899
1978	17,793	96.3	686	3.7	18,479
1979	39,196	95.7	1,757	4.3	40,953
1980	48,990	97.3	1,376	2.7	50,366
1981	53,351	98.7	720	1.3	54,071
1982	159,518	98.9	1,798	1.1	161,316
1983	168,618	99.6	659	0.4	169,277
1984	108,495	99.3	712	0.7	109,207
1985	104,619	96.0	4,385	4.0	109,004
1986	94,080	95.0	4,968	5.0	99,048
1987	34,617	93.4	2,447	6.6	37,064
1988	51,154	82.6	10,792	17.4	61,946
1989	44,498	93.6	3,030	6.4	47,528
1990 [b]	59,111	93.1	4,390	6.9	63,501
1991	95,756	93.3	6,846	6.7	102,602
1992	98,509	96.3	3,803	3.7	102,312
1993	147,160	97.9	3,146	2.1	150,306
1994	200,577	96.5	7,179	3.5	207,756
1995	182,894	93.7	12,232	6.3	195,126
1996	220,449	95.9	9,482	4.1	229,931
1997	118,418	93.8	7,891	6.2	126,309
1998	39,464	78.7	10,701	21.3	50,165
1999	54,439	93.2	3,981	6.8	58,420
2000	66,580	94.5	3,889	5.5	70,469
2001	11,402	93.1	849	6.9	12,251
2002	168,405	94.8	9,201	5.2	177,606
2003	154,446	95.8	6,824	4.2	161,267
1970-1985 Average	68,715	97.8	1,519	2.2	70,234
1986-2003 Average	102,331	94.3	6,203	5.7	108,534

[a] No fishery due to forecast of less than escapement requirements for Bristol Bay.

[b] Gear depth limitations in effect beginning in 1990.

Table 9. South Unimak and Shumagin Islands June sockeye and chum salmon daily harvests, 2003.

	South Unimak		Shumagin Islands		Combined	
Date	Sockeye	Chum	Sockeye	Chum	Sockeye	Chum
June1-9	Fishery Closed		Fishery Closed			
10	80,017	19,651	3,979	4,223	83,996	23,874
11	Fishery Closed		Fishery Closed			
12	52,996	24,881	5,838	5,360	58,834	30,241
13	Fishery Closed		Fishery Closed			
14	57,339	29,439	8,425	4,619	65,764	34,058
15	Fishery Closed		Fishery Closed			
16 [a]	2,495	542	5,162	1,025 [a]	7,657	1,567
17	47,488	18,532	17,865	43,228	65,353	61,760
18 [a]	6,166	658	Fishery Closed		6,166	658
19	42,547	10,308	11,738	39,220	54,285	49,528
20 [a]	5,255	575	Fishery Closed		5,255	575
21	22,112	6,531	17,828	28,810	39,940	35,341
22 [a]	1,970	283	Fishery Closed		1,970	283
23 [a]	Fishery Closed		1,451	433 [a]	1,451	433
24	7,018	4,038	13,561	11,868	20,579	15,906
25	Fishery Closed		Fishery closed			
26	8,249	4,118	25,210	18,902	33,459	23,020
27	Fishery Closed		Fishery closed			
28	2,251	1,613	6,187	3,581	8,438	5,194
29	Fishery Closed		Fishery closed			
30	Fishery Closed		Fishery closed			
Total	335,903	121,169	117,244	161,269	453,147	282,438

[a] Set gillnet only fishing period.

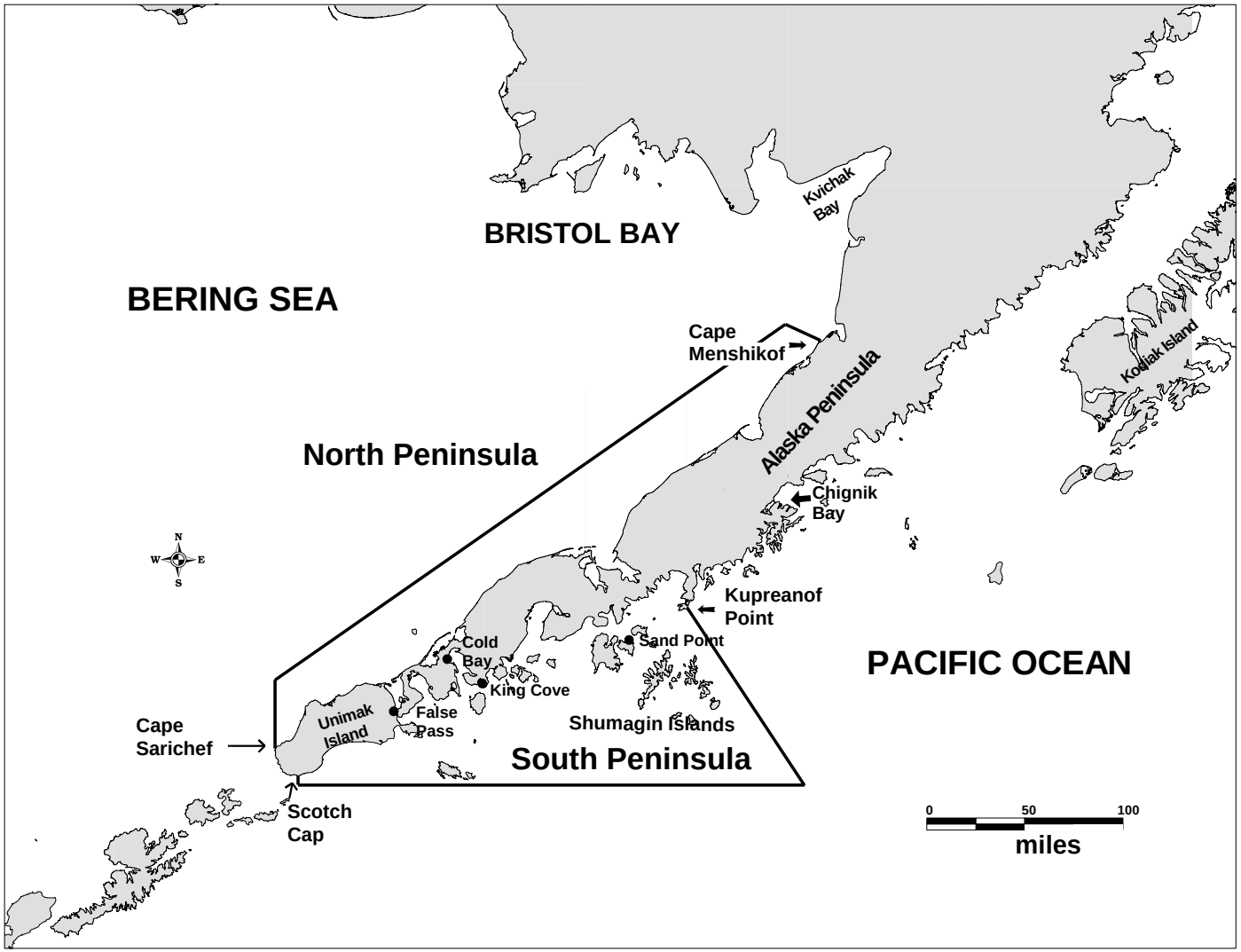

Figure 1. The Alaska Peninsula Management Area, denoting the North and South Peninsula.

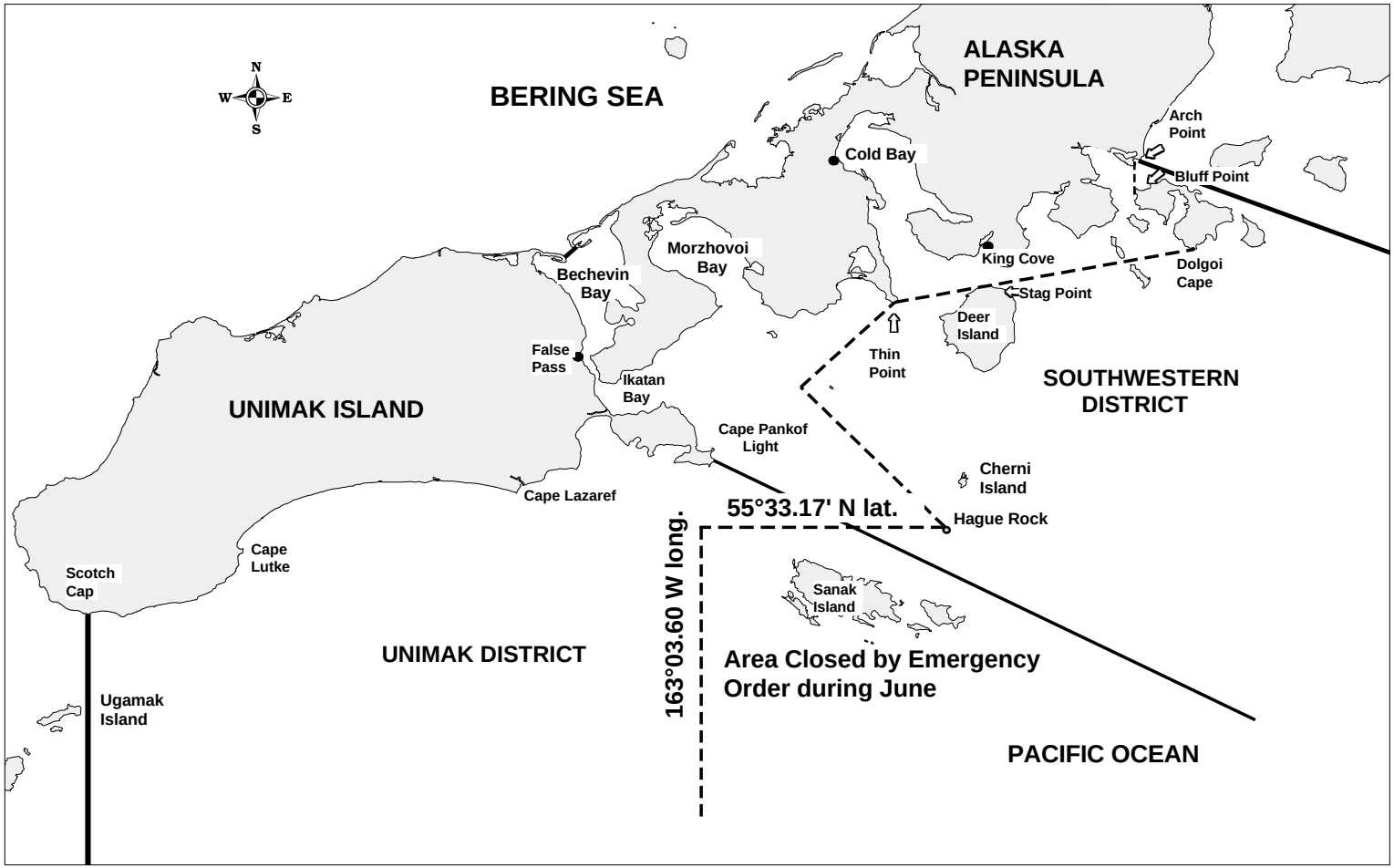

Figure 2. Map of the South Unimak June fishery.

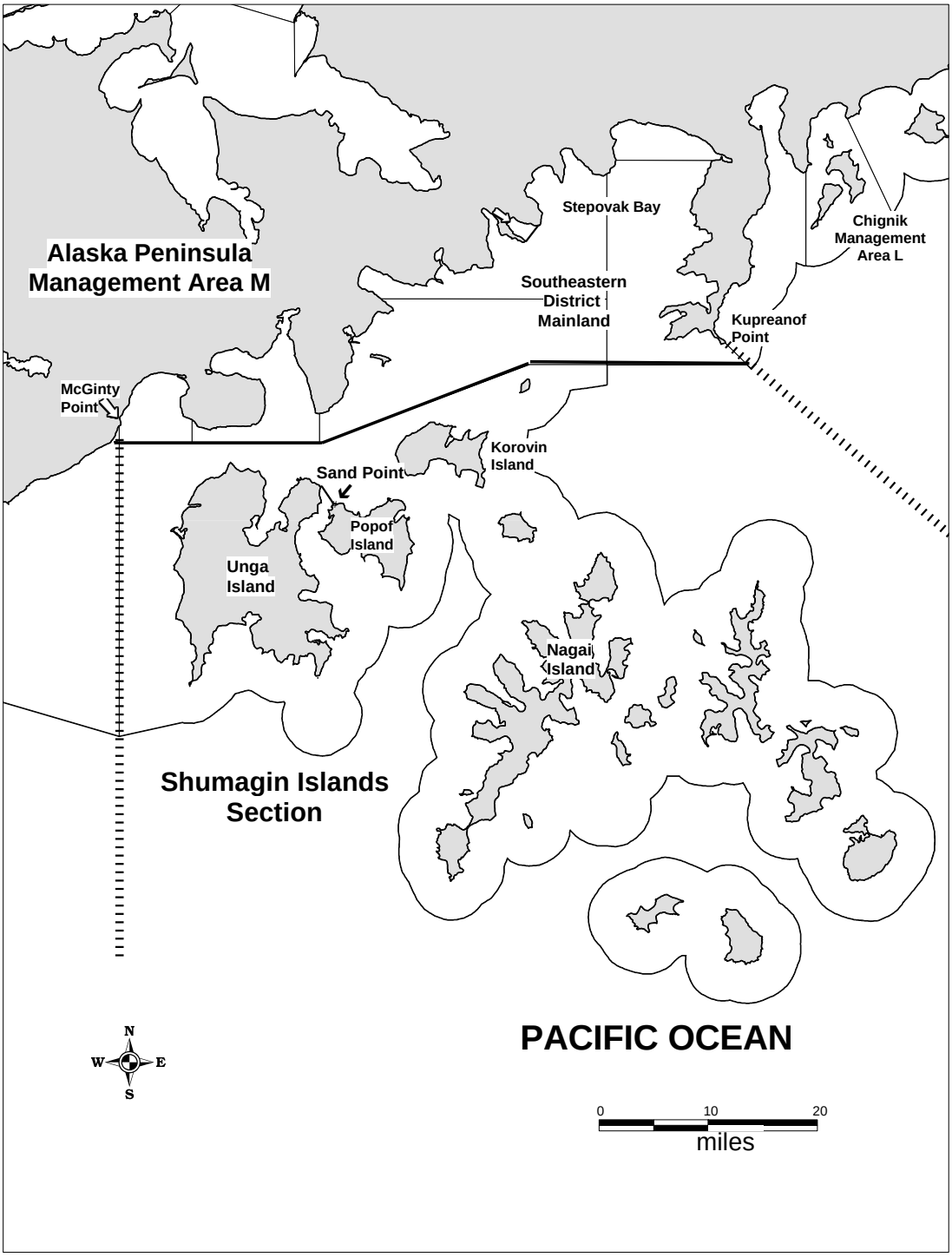

Figure 3. Map of the Shumagin Islands Section.

APPENDIX

Appendix A.1. South Unimak and Shumagin Islands June salmon harvest, in number of fish by species, 1970-2003.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total[a]
1970	1,016	1,650,108	48	103,053	436,477	2,190,702
1971	828	462,101	1	19,240	509,197	991,367
1972	642	501,197	20	17,924	518,810	1,038,593
1973	247	245,088	28	19,430	200,630	465,423
1974	0	0	0	0	0	0
1975	117	240,099	1	5,247	100,822	346,286
1976	2,132	303,584	3	23,824	410,270	739,813
1977	521	240,719	0	5,398	115,996	362,634
1978	534	486,811	3	89,942	121,892	699,182
1979	1,050	851,351	290	154,813	104,103	1,111,607
1980	3,193	3,206,275	853	1,526,306	508,865	5,245,492
1981	5,672	1,820,965	320	451,250	563,947	2,842,154
1982	7,131	2,118,701	1,241	1,718,825	1,095,044	4,940,942
1983	13,456	1,961,569	4	55,875	785,631	2,816,535
1984	3,854	1,388,203	14	919,876	337,120	2,649,067
1985	5,777	1,791,400	2,468	106,615	433,829	2,340,089
1986	1,895	471,397	2	291,989	351,769	1,117,052
1987	5,163	792,964	380	16,982	443,019	1,258,508
1988	4,064	756,687	255	180,224	526,711	1,467,941
1989	2,758	1,744,505	0	199,235	455,163	2,401,661
1990	10,332	1,344,529	1	515,047	518,545	2,388,454
1991	4,473	1,548,930	12	619,137	772,705	2,945,257
1992	3,760	2,457,856	4	642,090	426,203	3,529,913
1993	9,466	2,973,744	1,233	81,136	532,247	3,597,826
1994	7,590	1,461,263	1,579	2,492,514	582,165	4,545,111
1995	14,747	2,105,321	6,042	178,635	537,433	2,842,178
1996	2,845	1,028,970	13,219	377,684	359,820	1,782,538
1997	5,811	1,628,181	560	605,937	322,325	2,562,814
1998	2,696	1,288,725	476	474,340	245,619	2,011,856
1999	3,051	1,375,399	2	30,539	245,306	1,654,297
2000	2,849	1,251,228	304	360,029	239,357	1,853,767
2001	345	150,632	2	39,251	48,350	238,580
2002	2,443	591,106	4	76,251	378,817	1,048,621
2003	1,318	453,147	153	217,900	282,438	954,956
1970-1979 Average	709	498,106	39	43,887	251,820	794,560
1980-1989 Average	5,296	1,605,267	554	546,718	550,110	2,707,944
1990-2000 Average	6,147	1,678,559	2130	567,092	434,702	2,688,630
2002-2003 Average[b]	1,881	522,127	79	147,076	330,628	1,001,789

[a] Numbers of salmon do not include test fish catches.
[b] Averages do not include 2001 because of a lengthy strike.

Appendix A.2. South Unimak June salmon harvest, in number of fish by species, 1970- 2003.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total[a]
1970	868	1,510,373	46	83,325	391,568	1,986,180
1971	549	422,760	0	11,608	405,311	840,228
1972	400	426,799	4	11,906	411,000	852,081
1973	145	222,124	11	11,152	177,720	411,152
1974	0	0	0	0	0	0
1975	101	190,774	1	3,205	65,279	259,360
1976	1,827	231,568	3	18,181	336,161	587,740
1977	393	194,807	0	3,397	94,097	292,694
1978	267	418,935	3	47,380	103,413	569,998
1979	575	672,212	38	49,000	63,150	784,975
1980	2,927	2,731,148	853	1,140,611	458,499	4,334,038
1981	4,455	1,470,393	83	325,002	509,876	2,309,809
1982	5,577	1,668,153	1,241	1,032,154	933,728	3,640,853
1983	8,179	1,545,075	1	40,441	616,354	2,210,050
1984	2,024	1,131,365	0	470,688	227,913	1,831,990
1985	4,101	1,454,969	2	69,811	324,825	1,853,708
1986	1,363	315,370	1	150,674	252,721	720,129
1987	4,017	652,397	380	11,342	405,955	1,074,091
1988	2,125	474,457	11	86,678	464,765	1,028,036
1989	2,263	1,347,547	0	154,168	407,635	1,911,613
1990	8,464	1,088,944	1	444,249	455,044	1,996,702
1991	3,066	1,215,658	5	500,922	670,103	2,389,754
1992	2,373	2,046,022	3	501,127	323,891	2,873,416
1993	4,587	2,366,573	506	37,735	381,941	2,791,342
1994	4,468	1,001,250	1,271	1,731,741	374,409	3,113,139
1995	7,850	1,451,490	5,102	119,094	342,307	1,925,843
1996	1,228	572,495	11,730	146,799	129,889	862,141
1997	3,041	1,179,179	501	332,262	196,016	1,710,999
1998	1,259	974,628	312	125,906	195,454	1,297,559
1999	2,258	1,106,208	1	20,302	186,886	1,315,655
2000	2,064	892,016	303	210,521	168,888	1,273,792
2001	134	121,547	2	31,812	36,099	189,594
2002	433	356,157	3	33,789	201,211	591,593
2003	373	335,903	14	90,161	121,169	547,620
1970-1979 Average	513	429,035	11	23,915	204,770	658,244
1980-1989 Average	3,703	1,279,087	257	348,157	460,227	2,091,432
1990-2000 Average	3,696	1,263,133	1,794	379,151	311,348	1,959,122
2002-2003 Average[b]	403	346,030	9	61,975	161,190	569,607

[a] Numbers of salmon do not include test fish catches.
[b] Averages do not include 2001 because of a lengthy strike.

Appendix A.3. Shumagin Islands June salmon harvest, in number of fish by species, 1970-2003.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total[a]
1970	148	139,735	2	19,728	44,909	204,522
1971	279	39,341	1	7,632	103,886	151,139
1972	242	74,398	16	6,018	107,810	188,484
1973	102	22,964	17	8,278	22,910	54,271
1974	0	0	0	0	0	0
1975	16	49,325	0	2,042	35,543	86,926
1976	305	72,016	0	5,643	74,109	152,073
1977	128	45,912	0	2,001	21,899	69,940
1978	267	67,876	0	42,562	18,479	129,184
1979	475	179,139	252	105,813	40,953	326,632
1980	266	475,127	0	385,695	50,366	911,454
1981	1,217	350,572	237	126,248	54,071	532,345
1982	1,554	450,548	0	686,671	161,316	1,300,089
1983	5,277	416,494	3	15,434	169,277	606,485
1984	1,830	256,838	14	449,188	109,207	817,077
1985	1,676	336,431	2,466	36,804	109,004	486,381
1986	532	156,027	1	141,315	99,048	396,923
1987	1,146	140,567	0	5,640	37,064	184,417
1988	1,939	282,230	244	93,546	61,946	439,905
1989	495	396,958	0	45,067	47,528	490,048
1990	1,868	255,585	0	70,798	63,501	391,752
1991	1,407	333,272	7	118,215	102,602	555,503
1992	1,387	411,834	1	140,963	102,312	656,497
1993	4,879	607,171	727	43,401	150,306	806,484
1994	3,122	460,013	308	760,773	207,756	1,431,972
1995	6,897	653,831	940	59,541	195,126	916,335
1996	1,617	456,475	1,489	230,885	229,931	920,397
1997	2,770	449,002	59	273,675	126,309	851,815
1998	1,437	314,097	164	348,434	50,165	714,297
1999	793	269,191	1	10,237	58,420	338,642
2000	785	359,212	1	149,508	70,469	579,975
2001	211	29,085	0	7,439	12,251	48,986
2002	2,010	234,949	1	42,462	177,606	457,028
2003	945	117,244	139	127,739	161,267	407,334
1970-1979 Average	196	69,071	29	19,972	47,050	136,317
1980-1989 Average	1,593	326,179	297	198,561	89,883	616,513
1990-2000 Average	2,451	415,426	336	200,585	123,354	742,152
2002-2003 Average[b]	1,478	176,097	70	85,101	169,437	432,181

[a] Numbers of salmon do not include test fish catches.
[b] Averages do not include 2001 because of a lengthy strike.

Appendix A.4. South Unimak and Shumagin Islands June sockeye salmon allocations and harvests, 1975 and 2000.

	South Unimak		Shumagin Islands		Total	
Year	Allocation	Harvest	Allocation	Harvest	Allocation	Harvest
1975	165,000	190,774	50,000	49,325	215,000	240,099
1976	350,000	233,211	75,000	72,016	425,000	305,227
1977	195,000	195,680	42,000	45,912	237,000	241,592
1978	428,000	418,959	94,000	67,876	522,000	486,835
1979	900,000	672,293	200,000	179,139	1,100,000	851,432
1980	2,513,000	2,731,148	555,000	475,127	3,068,000	3,206,275
1981	1,442,000	1,470,563	318,000	350,572	1,760,000	1,821,135
1982	1,850,000	1,668,153	408,000	450,548	2,258,000	2,118,701
1983	1,469,000	1,547,369	324,000	416,494	1,793,000	1,963,863
1984	1,111,000	1,131,365	245,000	256,838	1,356,000	1,388,203
1985	1,380,000	1,454,969	305,000	336,431	1,685,000	1,791,400
1986	907,000	315,370	200,000	156,027	1,107,000	471,397
1987	635,000	653,536	140,000	140,567	775,000	794,103
1988	1,263,000	474,457	279,000	282,230	1,542,000	765,687
1989	1,199,000	1,347,547	264,000	396,958	1,463,000	1,744,505
1990	1,087,000	1,090,710	240,000	255,585	1,327,000	1,344,529
1991	1,573,000	1,215,658	347,000	333,272	1,920,000	1,548,930
1992	1,959,000	2,046,022	432,000	411,834	2,391,000	2,457,856
1993	2,375,000	2,366,573	524,000	607,171	2,899,000	2,973,744
1994	2,938,000	1,001,250	648,000	460,013	3,586,000	1,461,263
1995	2,987,000	1,451,490	659,000	653,831	3,646,000	2,105,321
1996	2,564,000	572,495	566,000	456,475	3,130,000	1,028,970
1997	1,840,000	1,179,179	406,000	449,002	2,246,000	1,628,181
1998	1,529,000	974,628	336,000	314,097	1,865,000	1,288,725
1999	1,024,000	1,106,208	226,000	269,191	1,250,000	1,375,399
2000	1,650,000	892,016	363,000	359,212	2,013,000	1,251,228

Appendix A.5. South Unimak and Shumagin Islands June fisheries, sockeye salmon allocations versus actual harvest and allocations if Bristol Bay runs were perfectly forecasted, 1975-2003.

Year	S. Unimak-Shumagin Islands Guideline Harvest Level (GHL)	Actual S. Unimak-Shumagin Is. Harvest[a]	Actual Bristol Bay Harvest	Combined Bristol Bay & S. Unimak-Shumagin Harvest	S. Unimak-Shumagin GHL % of Combined Bristol Bay & S. Unimak-Shumagin Harvest[b]	South Unimak-Shumagin Island Harvest % of the Combined Bristol B. & S. Unimak-Shumagin Island Harvest [b]	S. Unimak Shumagin Is. GHL if Actual Bristol Bay Harvest Was Forecasted[b]
1975	215,000	240,099	4,898,814	5,138,913	4.18	4.67	427,000
1976	425,000	303,584	5,619,292	5,922,876	7.18	5.13	492,000
1977	237,000	240,719	4,877,880	5,118,599	4.63	4.70	425,000
1978	522,000	486,811	9,928,139	10,414,950	5.01	4.67	864,000
1979	1,100,000	851,351	21,428,606	22,279,957	4.94	3.82	1,849,000
1980[c]	3,068,000	3,206,275	23,761,746	26,968,021	11.38	11.89	2,238,000
1981	1,760,000	1,820,965	25,603,081	27,424,046	6.42	6.64	2,276,000
1982	2,258,000	2,118,701	15,104,391	17,223,092	13.11	12.30	1,430,000
1983	1,793,000	1,961,569	37,372,031	39,333,600	4.56	4.99	3,265,000
1984	1,356,000	1,388,203	24,710,306	26,098,509	5.20	5.32	2,166,000
1985	1,685,000	1,791,400	23,702,883	25,494,283	6.61	7.03	2,116,000
1986[d]	1,107,000	471,397	15,776,056	16,247,453	6.81	2.90	1,349,000
1987	775,000	792,964	16,068,775	16,861,739	4.60	4.71	1,400,000
1988[d]	1,542,000	756,687	13,989,757	14,746,444	10.46	5.13	1,224,000
1989	1,463,000	1,744,505	28,735,306	30,479,811	4.80	5.72	2,530,000
1990	1,327,000	1,346,529	33,523,127	36,196,656	3.81	3.86	2,894,000
1991[d]	1,920,000	1,548,930	25,821,180	27,370,110	7.01	5.66	2,272,000
1992	2,391,000	2,457,856	31,879,676	34,337,532	6.96	7.16	2,850,000
1993	2,899,000	2,973,744	40,462,124	43,435,868	6.67	6.85	3,605,100
1994	3,586,000	1,461,263	35,224,050	36,685,313	9.78	3.98	3,045,000
1995	3,646,000	2,105,321	44,266,217	46,371,538	7.86	4.54	3,849,000
1996	3,130,000	1,028,970	29,588,297	30,679,270	10.20	3.35	2,546,000
1997	2,246,000	1,628,181	12,309,000	13,937,181	16.20	11.68	1,157,000
1998	1,865,000	1,288,725	10,035,601	11,324,326	16.47	11.38	939,919
1999	1,250,000	1,375,399	25,824,286	27,199,685	4.60	5.06	2,257,573
2000	2,013,000	1,251,228	20,532,315	21,783,543	9.24	5.74	1,808,034
2001[e,f]		150,632	14,033,574	14,184,206		1.06	
2002[f]		591,106	10,650,045	11,241,151		5.26	
2003[f]		453,147	14,866,000	15,319,147		2.96	
2002-2003, % of commercial harvest taken by SP June fishery						**4.09**	

-Continued-

[a] Salmon numbers exclude test fish harvests.

[b] These values were calculated by adding the actual Bristol Bay sockeye salmon harvest and the South Unimak and Shumagin Islands June sockeye salmon harvests and calculating the appropriate percentages. Calculations assume all sockeye salmon caught at South Unimak and the Shumagin Islands are destined for Bristol Bay.

[c] The 1980 Bristol Bay sockeye salmon catch would have been much larger had it not been for a lengthy strike.

[d] Sockeye salmon allocations were not reached largely, if not totally, due to a chum cap.

[e] The 2001 South Unimak and Shumagin Islands sockeye salmon harvest would have been much larger had it not been for a lengthy strike.

[f] Sockeye salmon allocations no longer in effect, 2001-2003 numbers represent what percent of the Bristol Bay destined harvest was taken in the South Unimak and Shumagin Islands June fisheries under the present management.

Appendix A.6. South Unimak and Shumagin Islands June fisheries, number of fishing days and hours open to commercial fishing by year and gear, 1975-2003.

	South Unimak[ab]				Shumagin Islands[ab]			
	Set Gillnet		Drift and Seine		Set Gillnet		Seine	
Year	Days	Hours	Days	Hours	Days	Hours	Days	Hours
1975	10	240	10	240	9	207	9	207
1976 [c]	19	456	19	456	13	312	13	312
1977	17	408	17	408	11	264	11	264
1978	23	552	23	552	23	552	23	552
1979 [d]	33	786	33	786	27	642	27	642
1980	30	720	30	720	30	720	30	720
1981	24	576	24	576	22	528	22	528
1982	30	720	30	720	24	576	24	576
1983	11	264	11	264	10	228	10	228
1984	5	110	5	110	6	134	6	134
1985	9	144	9	144	9	140	9	140
1986	8	148	8	148	8	160	8	160
1987	12	224	12	224	6	92	6	92
1988	8	112	8	112	9	153	9	153
1989	5	84	5	84	4	72	4	72
1990	13	281	13	281	9	200	9	200
1991	8	161	8	161	5	88	5	88
1992	8	139	8	139	5	42.5	5	42.5
1993	10	176	10	176	7	131	7	131
1994	14	281	14	262	13	262	13	249
1995	18	378	18	370	17	347	17	341
1996	16	378	16	372	13	306	13	276
1997	18	418	18	418	14	281	14	235
1998	18	424	18	424	18	418	16	344
1999	11	234	10	217	6	127	6	127
2000	18	426	18	426	8	176	8	176
2001 [e]								
2002	11	176	9	144	10	150	9	134
2003	12	192	9	144	10	150	9	134
Average 1992-2000	14	302	14	297	11	218	10	201
Average 2002-2003	12	184	9	144	10	150	9	134

[a] From 1992-2000, set gillnet gear was guaranteed 16 hours per fishing period regardless of the other gear types. Starting in 2001, set net fishing periods after June 24 could vary in length to be 16 hours in but were guaranteed length in the earlier part of the season.

[b] Prior to 1996, openings in the Cape Lutke Section were not synchronous with periods elsewhere in the South Unimak Fishery. Fishing time in those years was listed as anytime fishing occurred anywhere in the fishery.

[c] In 1976, the South Unimak fishery was extended through July 1 to compensate for fishing time lost at the end of June due to adverse weather conditions.

[d] In 1979, the South Unimak fishery was extended through July 3 to compensate for fishing time lost at the end of June due to adverse weather conditions.

[e] Due to lengthy price negotiations and changes in the management plan in 2001, fishing effort was absent during many of the open fishing periods. This makes comparisons of fishing time with past years, in this format, invalid.

Appendix A.7. South Unimak and Shumagin Islands June fisheries, sockeye per chum salmon ratio by gear type, 1970-2003.

	South Unimak				Shumagin islands		
Year	Purse Seine	Drift Gillnet	Set Gillnet	Total	Purse Seine	Set Gillnet	Total
1970	5.7	2.9	9.4	3.8	3.0	4.2	3.1
1971	1.4	1.0	0.0	1.0	0.3	0.0	0.4
1972	1.4	1.0	0.4	1.0	0.7	1.5	0.7
1973	1.8	1.2	4.4	1.3	0.9	2.2	1.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	2.3	3.2	0.0	2.9	1.4	0.0	1.4
1976	0.8	0.7	8.3	0.7	1.0	1.5	1.0
1977	3.0	2.0	5.8	2.1	2.0	10.6	2.1
1978	7.6	3.6	23.5	4.1	3.7	3.0	3.7
1979	25.0	4.5	15.1	10.6	4.2	7.7	4.4
1980	5.7	6.7	55.0	6.0	9.4	12.4	9.4
1981	2.3	3.8	21.0	2.9	6.2	25.4	6.5
1982	2.1	1.5	11.1	1.8	2.7	6.7	2.8
1983	2.3	2.9	14.9	2.5	2.4	16.3	2.5
1984	5.2	4.5	36.4	5.0	2.2	19.2	2.4
1985	7.1	2.8	14.8	4.3	3.0	4.0	3.1
1986	1.3	1.2	6.7	1.2	1.4	4.7	1.6
1987	1.5	1.6	5.2	1.6	3.1	13.8	3.8
1988	0.9	1.0	5.2	1.0	4.0	7.3	4.6
1989	3.8	2.7	12.7	3.3	8.1	11.9	8.4
1990 [a]	2.4	2.4	11.3	3.5	3.7	8.6	4.0
1991 [a]	1.6	2.1	6.5	1.8	2.8	9.5	3.2
1992 [a]	5.8	6.6	23.3	6.3	3.8	9.9	4.0
1993 [a]	5.5	7.5	8.0	6.2	3.6	24.1	4.0
1994 [a]	2.4	2.9	10.2	2.7	1.7	15.8	2.2
1995 [a,b]	3.8	4.6	5.6	4.2	2.9	9.9	3.4
1996 [a,b]	3.1	4.9	10.2	4.4	1.6	12.0	2.0
1997 [a,b]	3.0	7.0	11.5	6.0	2.9	14.0	3.6
1998 [a,b]	2.6	5.3	7.9	5.0	3.9	14.8	6.3
1999 [a,b]	4.4	6.5	6.2	5.9	3.7	17.4	4.6
2000 [a,b]	2.5	6.3	7.4	5.1	4.2	20.9	5.1
2001 [a,b]	3.0	3.3	5.1	3.4	2.2	5.2	2.4
2002 [a,b]	1.6	1.8	2.9	1.8	1.1	6.0	1.3
2003 [a,b]	2.5	2.6	6.3	2.8	0.5	5.1	0.7
1970-1989 Average	4.1	2.4	12.5	2.9	3.0	7.6	3.1
1990-1994 Average	3.5	4.3	11.9	4.1	3.1	13.6	3.5
1995-2003 Average	2.9	4.7	7.0	4.3	2.6	11.7	3.3

[a] Gear depth limitations in effect.
[b] Gillnet mesh size restrictions eliminated.

Appendix A.8. Estimated exvessel value of the South Unimak and Shumagin Islands June fisheries, 1985-2003.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1985	175,000	12,230,000	15,000	30,000	1,185,000	13,635,000
1986	33,000	3,427,000	0	62,000	932,000	4,454,000
1987	5,580	1,300,000	14	35,000	104,753	1,445,347
1988	121,000	10,216,000	0	99,000	3,721,000	14,157,000
1989	76,000	16,712,000	0	130,000	1,530,000	18,448,000
1990	119,000	14,057,000	0	242,000	1,521,000	15,939,000
1991	65,000	7,400,000	40	1,800,000	1,200,000	10,465,040
1992	64,000	21,774,000	0	138,000	1,075,000	23,051,000
1993	126,151	13,155,634	3,013	16,250	889,534	14,190,582
1994	100,000	6,382,000	4,170	657,500	911,000	8,054,670
1995	249,000	13,515,000	13,400	36,600	935,100	14,749,100
1996	24,530	4,988,500	26,540	47,630	203,800	5,291,000
1997	47,000	8,044,000	500	81,000	163,000	8,335,500
1998	20,800	7,083,000	730	124,370	165,400	7,394,300
1999	26,000	9,131,000	3	7,455	158,100	9,322,558
2000	23,000	6,262,000	464	86,078	182,150	6,553,692
2001 [a]	1,929	462,750	2	10,667	42,216	517,564
2002	8,765	1,762,000	3	14,742	260,541	2,046,051
2003	5,580	1,300,000	14	35,000	104,753	1,445,347
1985-1995 Average	103,066	10,924,421	3,240	295,123	1,273,126	12,598,976
1996-2000 Average	28,266	7,101,700	5,647	69,307	174,490	7,379,410
2002-2003 Average	7,173	1,531,000	9	24,871	182,647	1,745,699

[a] Due to a lengthy price dispute, the 2001 figures are not comparable to other years.